PREFERRED BIDDER PRICE CREEP IN THE UK PFI MARKET

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This report is the culmination of three years study, and as many years working in the Private Finance Initiative market, and I am sure that the well established relationship I now have with PFI will continue.

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ABBREVIATIONS

CBI	Confederation of British Industry
DfES	Department for Education and Skills
DoH	Department of Health
FC	Financial Close
FM	Facilities Management
MoD	Ministry of Defence
MPA	Major Projects Association
NAO	National Audit Office
NHS	National Health Service
NPV	Net Present Value
OBC	Outline Business Case
OBS	Output Based Specification
OGC	Office of Government Commerce
OJEC/OJEU	Official Journal of the European Union
PB	Preferred Bidder
PFI	Private Finance Initiative
PPP	Public Private Partnerships
PSC	Public Sector Comparator
PUK	Partnerships UK
SPV	Special Purpose Vehicle
VFM	Value for Money
4Ps	Public Private Partnerships Programme

ABSTRACT

This report investigates the extent of, and reasons for, price creep in the preferred bidder stage of UK PFI procurement. This is done firstly through the assemblage of a dataset of ninety English PFI projects focusing on four key sectors: Healthcare, Education, Custodial Services and Roads. Comparative price and time analysis identifies both extensive sectorial divergence and historical variance trends in relative price creep, at once confirming and confounding organisational learning hypothesis.

Secondly, evidence from semi structured market interviews provides insight into the issues surrounding price creep in the market generally, and various projects specifically. A primary trinity of contributing factors is identified as scope, risk and inflation. The links between these and price creep, together with complexity as a fundamental driver, is explored.

The ex ante bilateral relationship between the public sector client and private sector preferred bidder is interrogated in the confines of the gradual fundamental transformation as it transpires during the preferred bidder phase, with contingent reference to the preceding bidding stages as required. The integrated use of Transaction Cost Economics, Principal Agent theory and Relational Contracting is also used as a lens with which to view the preferred bidder price creep dynamic. Finally, the report draws conclusions about the efficacy of the PFI preferred bidder phase with respect to the reduction in economic efficiency that price creep engenders.

Key Words:

Private Finance Initiative, Price Creep, Preferred Bidder, Transaction Cost Economics, Economic Efficiency

Word Count:

10,918 (excluding footnotes, boxed quotations, tables, figures and appendices)

[1] INTRODUCTION

1.1 Background

The Private Finance Initiative (PFI)[1] was introduced in 1992 as a vehicle for the increased involvement by the private sector in the provision of public services. PFI's facilitation of this aim, in the design, build, finance and operation of capital assets and their associated public services by the private sector in return for an extended contract payment stream, created a new procurement model in the UK construction industry.

While construction procurement in its conventional sense relates specifically to the creation, refurbishment and maintenance of built assets as part of the overall investment stock within an economy, it is also viewed in this report as part of an institutional system of broad social and spacial structures of provision, as proposed by Ive and Gruneberg (2000a). In this context PFI provides a 'system option' in most UK public sector markets, from custodial care in HM Prisons, transportation, and the provision of schools, to NHS healthcare procurement. These are known accordingly as:

a) Social Structure of Healthcare Provision (SSHCP)
b) Social Structure of Education Provision (SSEP)
c) Social Structure of Custodial Provision (SSCP)
d) Social Structure of Roads Provision (SSRP)

The specifics of each option are further described in appendix A.

As with any new procurement model, especially one that carries the political momentum and public impact that PFI does, there has been a large body of literature from both public and private sector organisations analysing its performance. Empirical analysis of PFI to date, has focused on procurement performance in the relationship between final cost and delivery time at Financial Close (FC), and budgeted cost and delivery time at Outline Business Case (OBC).[2]
However, to enable effective comparative analysis with alternative procurement methods, the use of Financial Close as a 'like for like' comparator with traditional procurement contract price is questionable. Rather, use of the ITN firm price as a proxy, has validity in regard to greater equivalency in levels of design development and operating specification, equating any movement in price during the preferred bidder stage with traditional post contract movement.
Therefore, in examining the efficacy of one part of the PFI procurement model, the pre contract 'preferred bidder' negotiation stage, this report adds a complementary layer of analysis to existing PFI procurement discussion.

1.2 The Research Problem - Preferred Bidder Price Creep

The selection of Preferred Bidder (PB) and Negotiation to Financial Close (FC), which constitutes stage 12 of the HM Treasury guide to the PFI process (Treasury Taskforce) (refer fig 1.1), is a pivotal stage in the PFI lifecycle. It is the period where the market advantage associated with competing bidders, is forgone by the public sector client in favour of negotiation with one party - the preferred bidder.

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1 PFI is defined as a DBFO (design – build – finance – operate) contract type where the public sector purchases (and therefore the taxpayer funds) the privately financed and provided services. This compares to the politically alternative Public Private Partnership concession contract where the individual public users pay for the privately provided 'public' service.

2 NAO report PFI: Construction Performance (National Audit Office)

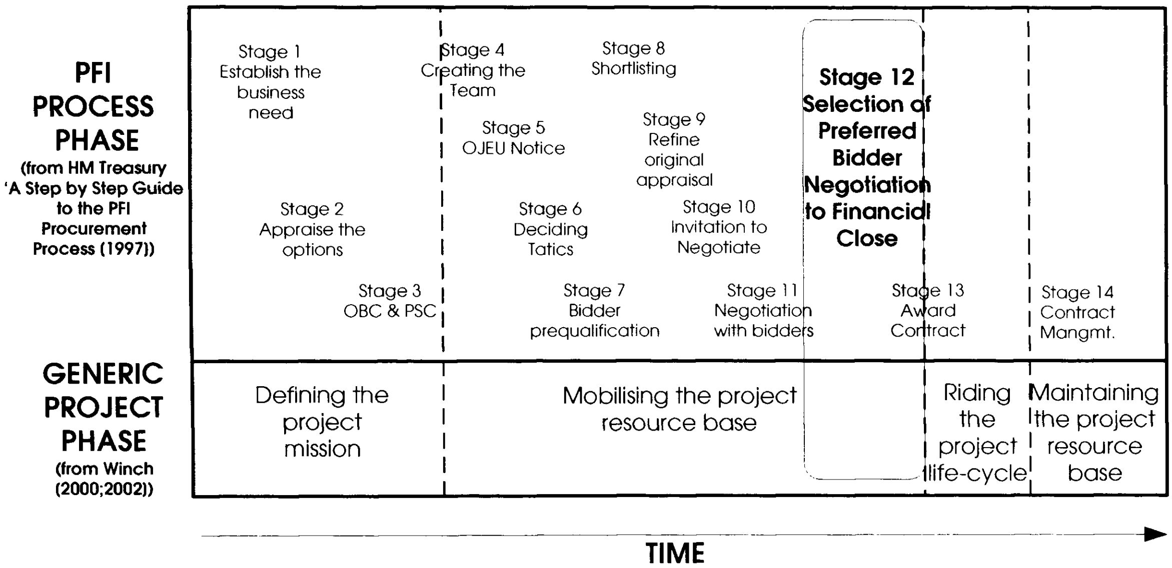

Figure 1.1 Generic and PFI Project Lifecycles (shaded zone represents the preferred bidder negotiation phase)

Treasury Taskforce (Treasury Taskforce 2000) describes this stage as:

"...the final stage before financial close and contract signature. Having already assessed the deliverability, affordability and value for money of the preferred bid, the time during this stage should be used to finalise detailed drafting of the project terms, and the schedules to the contract that specify the operation of the service and define the nature of the asset as proposed in the bid. The time should be used for putting the financial documentation into place rather than for substantive negotiations over commercial terms or price..."

However, project procurement not always follows this ideal and often many material project issues remain unfixed at PB announcement, becoming the subject of commercial negotiation prior to FC.

Treasury also acknowledges the loss of the advantages of competition inherent in the selection of a preferred bidder

"After the appointment of a preferred bidder, it may be difficult to maintain competitive tension. Since competition is the best driver of value for money, great care needs to be taken that the appointment is not made prematurely. However, prolonging competition beyond a point that is optimal increases costs for both bidders and procurers alike and increases the risk of the withdrawal of bids."

Therefore, without the advantages of *ex ante* market competition or *ex post* contractual fiat, the public and private sectors engage in bilateral trading activity (haggling and opportunistic behaviour as well as cooperative agreement) in an attempt to secure maximum share of the unallocated economic rents that this negotiation phase can present. The result is the potential for an increase in transaction costs as part of the larger problem of PB price creep.

Preferred bidder price creep is defined as the relative change[3] between the firm price upon which the PB was selected and the fixed price agreed at financial close.

Preferred bidder price creep: $\Delta P = P_{fc} - P_{pb}$

The significance of price creep is in its contribution to the problem of the deterioration of net value during the procurement of construction related public services, leading to economic inefficiency.

Overall Economic Efficiency or net value (*v*) = Benefit (*b*) to users - Resource Cost (c)[4]

Economic efficiency relates directly to VFM, a key driver in PFI procurement and the basis upon which PFI projects are mandated to progress. Economic efficiency permits greater VFM for both parties [5]. In the absence of economic efficiency gains, greater VFM for the public sector can only be acquired at the expense of the private sector, which introduces the secondary issue of economic rent allocation.

Price creep is responsible for determining the re appropriation of economic rents.

Total quasi rents (r) = v-c

where ; v = Total value of the project in use to the client and
c = Resource cost to the provider including opportunity cost of capital

Price (p) divides total quasi rents into two portions as seen in figure 1.2 below, with its vertical movement affecting redistribution of economic rents between the parties.

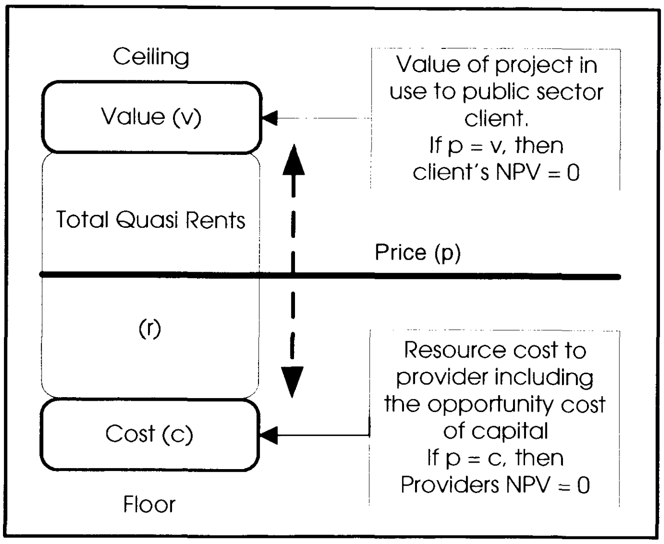

Figure 1.2 Allocation of economic rents

3 Relative change refers to the reference in this report to price creep as a percentage value rather than a monetary figure, thereby eliminating the project size variable where required

4 Includes the opportunity cost of resources, which is the benefit they could have yielded in their best alternative use, proxied by their market price if assuming a competitive market.

5 Greater VFM for the public sector client and greater profitability for the private sector

1.3 Research Objectives

The research aims to achieve two principal objectives:

- Analysing the *extent* of PB price creep: examining whether it is positive or negative, how it varies between projects, sectors, Project Cos. and over time.
- Investigation of the *reasons for* PB price creep: drawing out the contributing and inhibiting factors and exploring their interaction in empirical projects and a theoretical model.

1.4 Research Scope

As outlined in 1.2 above, the primary focus of the report is price creep within the PB stage of PFI procurement. However, as a consequence of inherent lifecycle dependencies, PB could not be analysed in complete isolation. Therefore, contingent reference is made to the preceding bidding stages in order to provide research insight, explanation and coherence.
Attention is directed to the Design and Finance aspects of the DBFO contract (refer appendix B for the generic structure of a PFI project), with price creep issues beyond Financial Close, i.e. Build and Operate, excluded.
Four PFI sectors; Healthcare, Education, Custodial, and Roads, have been included in the study. They represent the divergent characteristics present in the PFI market, and therefore provide opportunity for comparative analysis and statistical range.[6]
Diversity is also sought in the chronological research parameters, with the earliest (December 1995) to the most recent (April 2005) signed projects included.
The geographical scope of the report incorporates the nine English regions (see data set in section 3), although the issues examined and outcomes derived are equally pertinent to other UK PFI markets.
Research scope also excludes projects not specifically construction related i.e. IT and fleet projects.

1.5 Methodology

The report can be broken down into a series of linked stages of data collection and analysis:

1.5.2 Stage 1: Preliminary activities - literature review and informal discussion with the market

In order to clarify the scope of the research problem the two main preliminary activities undertaken were to review relevant existing literature and hold informal discussions (test inquiry) with a random selection of PFI market actors.
The literature review consisted of both specific PFI and generic economic and management texts. This allowed the robust use of both theoretical (top down) and practical (bottom up) viewpoints. The PFI literature was varied in nature and included practitioner orientated case studies, journal articles and both government and industry guidance, together with more academic texts (refer section 2). Use of the internet to review PFI related resources was extensive, owing to the fluid nature of the market and the ease of access the most current information that the medium provides. The informal discussions were held in an ad hoc manner with various industry representatives from both the public and private sectors. These guided the research approach required as part of stage 2.

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6 The defence sector (MOD), although a significant component of the PFI market, has been excluded due to the practical problem of data confidentiality (see appendix C) as well as a more general lack of 'project type' discreteness.

1.5.3 Stage 2: Benchmarking survey - dataset preparation

To enable a statistically significant quantitative data set from which to analyse the extent of price creep, the maximum possible number of projects were required to ensure the sample represented the full sectorial, historical, project scale, and supplier variances found in the PFI market. A strategy of approaching data collection from the top down was used. The publication by HM Treasury and Partnerships UK (refer bibliography) of a data list relating to all of the signed PFI deals was the starting point in the compilation of the sample. However, no specific data is published by these public organisations relating to the preferred bidder price or date of PB announcement. Gaining this outstanding primary data at source was critical to supporting the central research problem by establishing the change in capital value over the preferred bidder period.
However, it introduced the following problems:

- Restricted access to data resulting from public and private sector confidentiality and the related problem of Response Bias, whereby the commercially sensitive nature of the data inquiry has the potential to attract greater disclosure from respondents with 'positive' results therefore skewing the results in a positive direction. This condition is more prone with recent projects therefore caution is advised in the reading of price based results generally, and recent results particularly.
- Accessibility of historical PB data from the earliest projects, which was not systematically recorded and centrally reported with the same rigour as FC prices, was often archived off site, and the people involved at the time had moved on.
- Price data was recorded and reported in one of three ways: as a capital value[7], as an annual unitary charge (U.P.), and as an NPV[8]. While the potential inconsistency using three types of price data was reduced as a consequence of using the percentage difference in prices rather than actual prices, caution is still required by the reader in interpreting the data as flawlessly comparable.

To minimise the potential for the above problems, the PFU, Partnerships UK, and other such central policy organizations were approached first, based on the assumption they may already have centralized but unpublished PB data, followed by approaches made to individual PFI project clients and PFI Cos. The exact makeup, sources and description of the data set is provided with the actual dataset in section 3.

1.5.4 Stage 3: Semi-structured interviews

The quantitative data established by the benchmarking survey provides the basis for complementary semi-structured interviews with both public sector PFI clients and private sector PFI Cos. The interviews provide quantitative and qualitative data, enabling investigation into the factors that impacted upon the preferred bidder negotiation and the associated price movement both in specific PFI projects, or more generally in a sector or the whole PFI market. The interview sample consists of ten representatives, six public sector and four private sector. They are from both the strategic level and project level, with project directors or managers in central PFI policy units through to individual project managers. They also represent the four main sectors, as well the MOD, and in the private sector group include FM servicing. These are described in more detail in Appendix F.

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7 Capital value is defined by HM Treasury CEU as:
"the initial value of the capital assets created under the PFI contract. The capital assets are assets with a life of more than one year (i.e. not expected/possible to be converted into cash in one year)."

8 Net Present Value (NPV) is defined by the Treasury Green Book as "*The discounted value of a stream of either future costs or benefits. The term Net Present Value is used to describe the difference between the present value of a stream of costs and a stream of benefits*"

1.6 Report Outline

The structure of the report continues in chapter 2 with a discussion of the theoretical framework of Transaction Cost Economics, Principal Agent Theory and Relational Contracting that underlies the report's approach to PB negotiation and price creep. Chapter 3 presents a data set, benchmarking price creep over the PFI market. Chapter 4 analyses in detail the data set, integrating this quantitative information with the emergent issues from the PFI market interviews. Chapter 5 gives conclusions and recommendations to the public sector client and the private sector firm.

[2] LITERATURE REVIEW

2.1 Introduction

This section begins by introducing the institutional context within which microeconomic features and theories of contract transacting are positioned. These theories, namely Transaction Cost Economics, supported by Agency theory and Relational contracting, are then discussed with reference to construction, PFI procurement generally and the PB stage specifically.

2.2 The Institutional Context

Coase (1937, 1952, p333) first examined the issue of economic organisation in comparative institutional terms. He proposed that firms and markets are alternative means of organisation, and that transaction costs determine the mode selected. Ive & Gruneberg (2000a) also identify the primary institutions of the economy as markets and firms. Firms (principals and their agents) are seen as the 'players', with 'non-organisation' market and public institutions providing the transaction 'rules' i.e. "practices and networks that influence the ways in which those organisations operate and interrelate" (Rowlinson, 1997 as cited in Ive &Gruneberg, 2000a, p.27).
At a national level, the set of stable overarching institutions are referred to as a social structure of the economy or (SSE) (Gordon et al., Reich, and Weisskpf all in Kotz et al. (eds) 1994 as cited in Ive & Gruneberg, 2000a p.5). At the industry level, the sub-set of stable markets, firms and individuals constitute a social structure of provision (SSP), often further identified by specific product or investment type e.g. social structure of housing provision. Barney (2002) views Industry social structure as "industry culture", that is, the accepted, usually implicit norms of behaviour and competition that evolve in industries.
Winch (2001) credits Bowley (1966) with pioneering the institutional analysis of the UK construction industry business system. Ive and Gruneberg (2000a) elaborate on Bowley's work, further defining the speculative, contract and integrated systems into specific social structures of provision for various markets. They propose that DBFO contracts are recognised as a new 'genus' (2000a, p32). PFI, the local variant of DBFO, is currently used as a 'system option' in most UK public sector markets, as shown in section 1.1and appendix A.

Williamson also believes that "Firms, markets, and relational contracting are important economic institutions..."(1985, p15). He focuses on transacting - contracts and their governance, at the microanalytical level. (1985, p408). He outlines a 'cognitive map of contract' (refer fig 2.1). New Institutional Economics is located on the efficiency branch, and distinguishes between approaches that feature incentive alignments, and those with economies of transaction costs. The incentive alignment literature focuses on the ex ante side of contract, and incorporates property rights literature (emphasising that ownership matters), and agency literature.

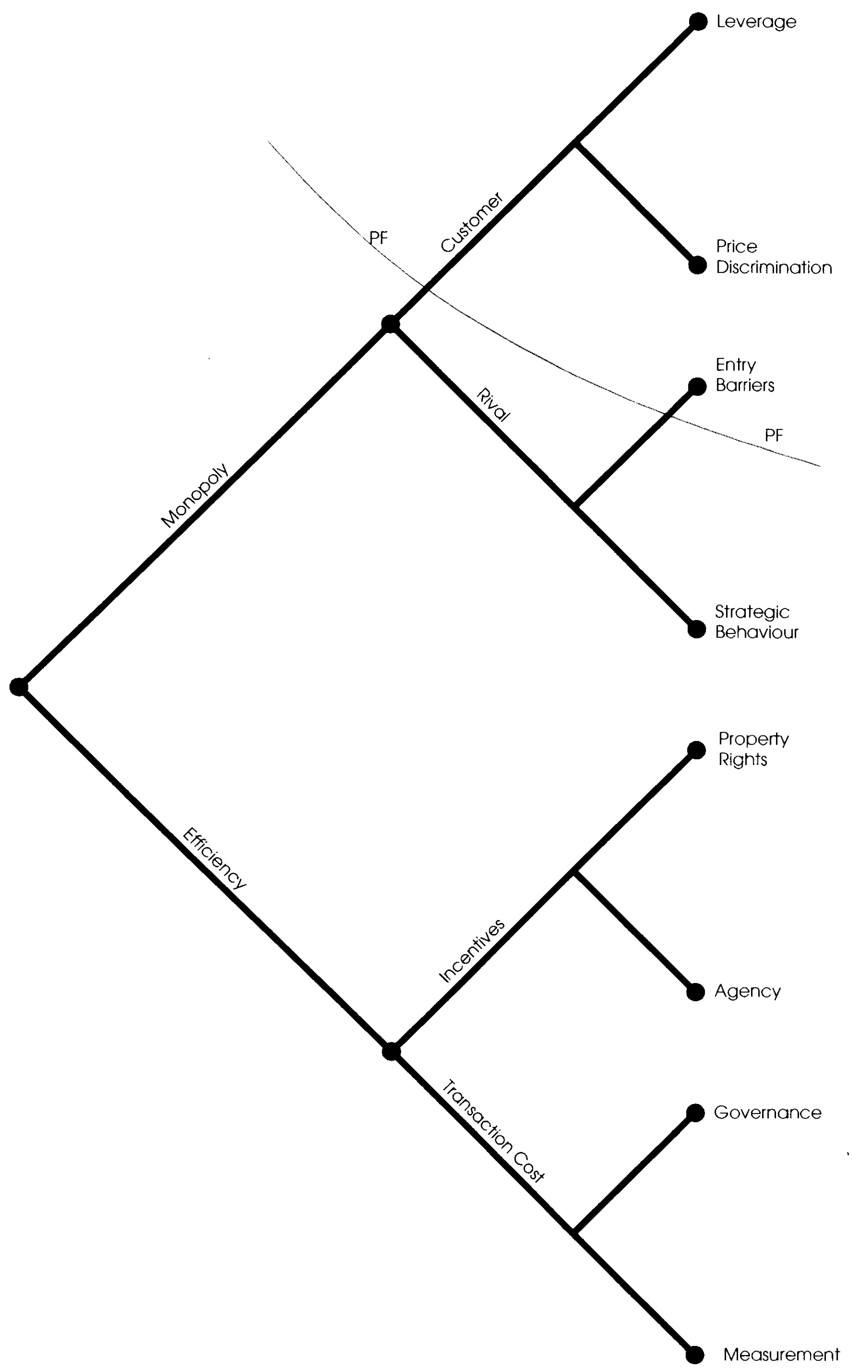

Figure 2.1 Cognitive map of contract (from Williamson, 1985)

2.3 Agency Theory

Agency theory, as described in Walker (2002) citing Donaldson (1990a), "holds that many social relationships can be usefully understood as involving two parties: a principal and an agent. The agent performs certain actions on behalf of the principal, who necessarily must delegate some authority to the agent (Jensen and Meckling 1976). Agency theory specifies the mechanisms that will be used to try to minimise agency loss[9] in order to maintain an efficient principal - agent relationship.
Williamson identifies agency theory as consisting of two parts; the first known as the positive theory of agency which maintains the efficacy of natural selection processes, and the second is referred to as 'principal - agent' or the 'mechanism design' approach which focuses on ex ante incentive alignments. Mechanism design acknowledges the presence of 'contracting complications' as part of the principal / agent problem (refer 2.4.3), and therefore attempts to resolve any issues via comprehensive ex ante contract crafting, with the assumption that ex post court ordering is efficacious.
Agency theory's focus on ex ante negotiation and minimising 'agency loss' makes it suitable for analysing aspects of the Preferred bidder negotiation phase of PFI contracts, with Public sector client as principal and PFI Co. as the agent. However, given its 'problematic' reliance on legal centralism, Agency theory's use as part of a broader Transaction Cost Economics (TCE) framework, which values ex post as well as ex ante institutions of contract and private ordering, would seem more appropriate. Hence, there is a degree of fluidity to Williamson's cognitive map of contract.

2.4 Transaction Cost Economics (TCE)

2.4.1 Transaction costs are defined by Arrow as the "costs of running the economic system" (1969,p.48), and are distinguished from production costs.[10]
In a contractual context, Williamson states that transaction costs are the cost of "effort to identify, explicate and mitigate contractual hazards", and believes that TCE[11] can be used to evaluate any contracting relation, both explicit and implicit.
Rahman and Kumaraswamy (2002) view transaction costs in construction as the costs of negotiation and writing contingent contracts; costs of monitoring contractual performance; and the costs of enforcing contractual promises. They cite Joskow(1985) in remarking that each case may include the costs of acquiring and processing information, legal costs, organisational costs and costs associated with inefficient pricing and production behaviour.

2.4.2 Williamson uses a conceptual framework to assess contract transactions, comprising the following approaches:

1) The behavioural assumptions accorded to contractual man - namely bounded rationality and opportunism, but also risk neutrality.
2) The attributes or dimensions of transactions believed to be of economic importance - asset specificity, frequency and uncertainty.

Winch (2001) elaborates on this framework by adding a third element relating to context, which is discussed in section 1.1 and 2.2 in regard to institutional systems, and relates to relational contracting discussed in 2.5.

2.4.3 Behavioural Assumptions

Coase's dictate "Modern institutional economics should study man as he is, acting within the constraints imposed by real institutions."(1984, p231) influenced Williamson's

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9 Since the interests of the principal and agent are inclined to diverge, the delegation of authority from the principal to the agent allows a degree of underfulfillment of the wishes of principal by the agent which is termed agency loss.

10 Winch (2001) believes that total costs comprise the costs of production and the cost of governing the transactions inherent in that choice of production technique.

11 Williamson describes Transaction Cost Economics (TCE) as "a comparative institutional approach to the study of economic organisation in which the transaction is made the basic unit of analysis" (1985, p387).

assumptions about the influence of the human component (motivation, cognitive limitations and moral character) on transaction costs. Williamson characterises this by introducing the behavioural assumptions of bounded rationality and opportunism.

Opportunism

"When people seldom deal with each other, we find that they are somewhat disposed to cheat, because they can gain more by a smart trick than they can lose by the injury which it does to their character" Adam Smith cited in Milgrom and Roberts (1992, p.257) This early economic view of human nature is refined by Williamson within a TCE framework as opportunism - the strongest form of self interest seeking. Opportunism more often involves subtle forms of deceit..." (Williamson, 1985 p47) adding that opportunism refers " to the incomplete or distorted disclosure of information...It is responsible for real or contrived conditions of information asymmetry, which vastly complicates problems of economic organisation"
Opportunism is identified in the construction industry during the *ex ante* forming (adverse selection) and *ex post* motivating (moral hazard) of the project coalition (Winch, 2002)

"Having determined the project mission, the client's next task is to select the firms that will provide the resources required. Clients are typically faced with an overwhelming variety of firms claiming that they have the competence to meet their needs... How is the client to choose those that are appropriate, competent and trustworthy? This is what is known as the principal / agent problem... In construction, the process of selecting competent suppliers is known as the process of procurement, ..." (Winch, 2002, p95 and cited in Ive et al (2004))
Ive considers the procurement problem to be synonymous with the principal /agent problem, described by Winch as existing when " The client (the principal) wants to hire the most competent (efficient and effective) suppliers (the agents) of the required resources, yet the agent knows more about its real competence than the principal".

Adverse selection, or what is known as the "lemon problem" (Akerlof, 1970) occurs when the client faces the problem of deciding if the lowest tendered (ex ante) price is offered because the supplier is the most desperate and is disguising an inferior product. Winch (2002) described this as a version of Gresham's Law (bad money drives out good money), which is "particularly severe in construction because of the very high levels of uncertainty inherent in the construction project process, and it is highest in the earlier stages of the project" (Winch, 2002 p96)
Traditional procurement has solved this problem through the division of design and construction, with greater attention given to establishing a relationship with the designer in the early and more uncertain stages based on trust, professional reputation and historical association. This allowed lowest price tender competition to be used for later contractor selection based on a completely pre-developed design.
Ive suggests that PFI, with its DBOT combined "take it or leave it" set and disallowance of any client in-house solution, defies the logic of the traditional approach. Rather, the client is forced into either establishing the same confidence in the PFI Co that they traditionally had in the designer, or developing more effective contractual means of insuring quality. Since the efficacy of a purely contractual approach is unreliable, as is shown below, relational contracting, based on a climate of trust, cooperation and a shared conception of project mission, and discussed further in section 2.5, is essential for effective PFI projects.

The ex post condition of Moral Hazard describes a situation whereby the supplier, once contracted, will not perform in the full interests of the client. This opportunistic threat is more acute in construction due to the general incomplete nature of construction contracts.[12]

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[12] Winch (2002), proposes more specific reasons:

- Suppliers have information that is critical for effective client decision-making, but are not motivated to fully share that information.
- Buyers cannot easily monitor the quality of the goods or services received, and so suppliers are tempted to substitute lower quality goods or be less than diligent in the supply of services.
- Clients find it difficult to clearly measure the relative performance of the contractually separate members of the project coalition.

Therefore, motivating consummate rather than perfunctory performance is a major governance problem. Winch (2002 p126) describes the complex contract as the main governance mechanism used in response. It acknowledges and allows for the reality of changes in the terms of the contract through the project lifecycle, and in doing so "has the effect of turning market into hierarchy". However, Winch also acknowledges that complex contracts frequently set up perverse incentives, generate high transaction costs, and often lead to a climate of adversarial relations.
The costs of preparing contracts to guard against later 'hold up' of either party by the other have been much higher overall in PFI than in any other construction procurement type (Construction Industry Council, 1998 and 2000 cited Ive et al (2004) This can be attributed in part to higher uncertainty introduced by the average thirty-year contract duration, as well as the historically decentralised nature of the PFI client and the time delay of learning effects as the PFI system matured. The introduction of standardised forms of contract, as well as standard specification and payment mechanisms (Gruneberg and Ive, 2000, chapter 5), and greater centralised coordination, may assist some PFI sectors in reducing these procurement costs.
Of particular interest in this report is the impact of learning effects on the reduction of moral hazard during the PFI preferred bidder negotiation phase - that is, without the benefit of a complex contract and advanced formal incentive mechanisms of Agency theory. While standardisation and centralisation bring transaction, (private sector procurement and public sector bidding) cost saving at preferred bidder, they may also help reduce the problem of incentivising pre contract perfunctory performance and guard against pre contract hold up.

Bounded Rationality

Williamson (1985, p45) describes bounded rationality as the cognitive assumption on which TCE relies, whereby economic actors have a semi strong form of rationality[13]. They are assumed to be "intendedly rational, but only limitedly so" (Simon, 1961, p. xxiv). Bounded rationality is used as the behavioural lens with which to analyse the economising consequences of both heuristic practices and the discriminate assigning of transactions to governance structures within a particular institutional setting - in the case of this report the actions of the parties during the PB negotiation phase in the PFI system when confronted with complexity and uncertainty. Also, it has an indirect relationship to organisational learning.

2.4.4 Transactional Dimensions

Williamson (1985) identifies the dimensions with which transactions differ as asset specificity, frequency and uncertainty. These dimensions are interrelated (refer fig 2.2).

- Uncertainties regarding the utility of the facility mean that the client may wish to make changes in its functionality as new information becomes available through the project life cycle.

Another factor not included by Winch is the traditional risk spreading behaviour of construction supplier's resource over a series of concurrent projects.

13 As compared to the strong form found in neoclassical maximising.

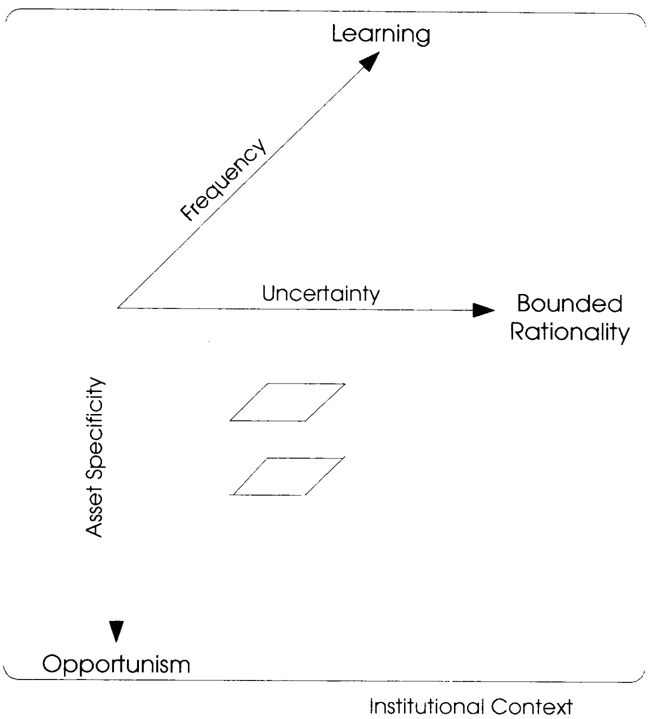

Figure 2.2 The Transaction Governance Framework (From Winch 2001)

Asset Specificity & the 'Fundamental Transformation'

Williamson identifies four types of asset specificity[14]; site specificity, physical asset specificity, human asset specificity and dedicated assets. He also distinguishes degrees of specificity ranging from wholly specific or idiosyncratic (k) through to non-specific (v), with semi-specific being a mixture of k and v. In a transaction context, idiosyncratic investments create 'lock in' effects that can be the source of cost savings but also strategic hazards since in the case of premature contract termination specialised assets cannot be redeployed without value loss. When specific investments are at stake, trading continuity gains importance and therefore the identities and relationship between the parties matters. (refer section 2.5 Relational contracting)

In construction asset specificity is not usually evident pre contract. There are usually a large number of qualified bidders at the outset, and client value can be gained using this competitive market advantage to offset opportunism and secure favourable contract terms. The problems of asset specificity arise ex post through what Williamson defines as the "Fundamental Transformation" (Williamson, 1985, p55) i.e. the transformation from large numbers bidding to bilateral supply. In PFI, the disjuncture of the transformation to bilateral supply from contract signature creates a gradual fundamental transformation situation that occupies the entire PB stage.
Winch (2001) contends that asset specificities are created which increase the possibility of opportunistic behaviour by the parties -"once a contractor has started work, then typically the costs of replacing that supplier are quite high, both in straight financial terms and perhaps more so in terms of project progress".
Sunk capital is not easily switched to other uses, and the ability to switch is asymmetrically distributed between the parties. Construction suppliers tend to make general purpose investments to retain the possibility of switching e.g. Multi-purpose plant that is usually

14 Asset specificity is defined by Williamson as "durable investments that are undertaken in support of particular transactions, the opportunity cost of which investments is much lower in best alternative uses or by alternative users should the original transaction be prematurely terminated" (Williamson 1985, p56)

hired, and craft based rather than specifically skilled human resources allow quick redeployment to another project should problems arise.
Switching costs to the client include; a) the transaction costs of retendering, b) Inability to recover the additional costs generated by the original supplier's failure from the new supplier, c) Associated litigation, d) The premium likely to be charged by the new supplier to complete the works due to the uncertainties around what work has actually been successfully completed (Winch, 2002 p.126). The margin for ex post supplier opportunism is therefore equal to the client's switching costs. This includes indulging both perfunctory supplier performance and the scope for ex ante PFI contract adjustment opportunism to this margin - better the devil you know than the devil you do not.
However, Williamson does not view this situation quite as asymmetrically, stating that as "joined as they are in a condition of bilateral monopoly, both buyer and seller are strategically situated to bargain over the disposition of any incremental gain whenever a proposal to adapt is made by the other party. Although both have a long-term interest in effecting adaptations of a joint profit-maximising kind, each also has an interest in appropriating as much of the gain as he can on each occasion to adapt." (Williamson, 1985 P63)

Frequency

Specialised governance structures, as described above, introduce increased costs. Williamson (1985) suggests these costs are more easily recovered for large transactions of a recurring kind, and therefore the frequency of transactions is an important dimension. Winch contends that typically construction frequency is one-off "effectively unity for most client / supplier dyads" (Winch, 2001) Williamson suggests "the possibility of aggregating the demands of similar but independent transactions" in the situation "where frequency is low but the needs for nuanced governance are great", which is appropriate when considering PFI procurement.

Uncertainty

The third critical dimension of TCE is uncertainty. Milgrom and Roberts (1992) link uncertainty to complexity, stating that the combination of uncertainty and complexity together create dynamic conditions that quickly reach bounded rationality limits.
Winch (2001) believes dynamic uncertainty in construction decreases throughout the generic project lifecycle as design information is acquired and options are reduced. Uncertainty is also dependant upon project type e.g. a repeated portal frame shed project will involve less uncertainty than a one-off tunnelling project. It therefore influences the appropriate form of resource base selection, with the " lower the levels of mission and dynamic uncertainty, the more appropriate is the use of competitive tender; the higher the levels of mission and dynamic uncertainty, the more appropriate is appointment or the use of in-house capabilities" (Winch, 2001p105)
Integrated coalitions (design and build) are not appropriate when uncertainty is high due to the requirement to select both design and construction suppliers relatively early in the project lifecycle. Therefore they tend to be used for simple building types that are repeated, such as industrial and commercial facilities (Winch 2002, p104). PFI challenges this heuristic. It uses integrated coalitions to procure projects that range in both complexity and repeatability. They vary from extremely complex and specific one-off hospitals for individual NHS trusts to more 'straightforward' civil engineering roads projects for a centralised client where a relatively few proven technical solutions can be combined and repeated e.g. modular construction. This non-contingent approach is the result of political resistance to public sector vertical integration, as well as a desire to maximise risk transfer for perceived VFM gain. It results in greater work up front by the PFI client in the production of a comprehensive OBS to explicitly identify the project mission. It also results in prolonged ex ante negotiation where high dynamic uncertainty is present.

2.5 Relational contracting

2.5.1 With no specific contract in place at the PB stage, the PFI process forgoes reliance on the legal mechanisms provided by Neoclassical contracting and trilateral governance in favour of a bilateral trading condition[15]. This environment is conducive to the development of Relational Contracting (RC), a co-operative based relationship between contracting parties. RC delivers value both by providing mutual benefits and win-win scenarios while offsetting opportunism.

Barney defines cooperative strategies as those that exist when firms work together to reach a common goal or objective, such as the joint desire to reach FC in PFI projects[16]. Williamson develops the RC idea further, proposing that a truly relational approach focuses on the "entire relation as it is developed through time. This may or may not include an 'original agreement'; and if it does, may or may not result in great deference being given to it" (Macneil, 1978, p.890). He also refers to Atiyah in regard to the continuous nature of business relationships often meaning that "the goodwill of other contracting parties is often more important than the letter of the contract. (Atiyah, 1979 pp.714-715). In emphasising RC's divergence from the neoclassical system where the original agreement is the reference point for effecting adaptations, Williamson has made explicit the notion that RC pervades both the *ex ante* as well as *ex post* world of contract. RC therefore conforms to Williamson's 'contracting in its entirety' view.

2.5.2 Confidence & Trust

Most commentators link trust with confidence (Arrow, 1973 p23), (Das and Teng, 1998). Winch (2001) citing Lyons and Mehta (1997) elaborates that in the context of construction transaction governance, trust provides a confidence that the parties to the contract will not take advantage of asset specificities to behave opportunistically, either by withholding information or seeking monopoly rents, in what is alternatively known as the "prisoner's dilemma' scenario or 'the problem of cooperation' (Axelrod, 1984).

Transaction Cost economists however, find "the use by social scientists of user-friendly terms such as trust" (Williamson, 1990) to be unconvincing as credible commitments. Williamson does not dismiss trust altogether however, citing membership of self regulated professions as providing a degree of transacting confidence and 'culture' serving as a constraint on opportunism. This confidence relies firstly on certification, which assures a minimum level of competence in prospective partners, but more importantly, on reputation effects. PFI addresses the certification issue by pre qualification screening, but is notable for its lack of professional governance, with contractor led consortia not subject to the same professional competency effects as traditional architect led design procurement.

2.5.3 Reputation Effects

Reputation effects will "deter defection from the letter and the spirit of an agreement in the degree to which (1) defections can be made public knowledge, (2) the consequences of defection can be fully ascertained ...and (3) parties who experience or observe defection penalize the offender and / or his successors in 'full measure'" (Williamson 1985, p396)

However, PFI clients lack frequency of transaction to provide either historical basis or future incentive for direct reputation effects, i.e. those based on actual previous relations. This situation is somewhat reduced in the PFI sectors that maintain a centralised procurement function. Instead, most PFI clients are reliant upon indirect reputation effects transferred though a public communication network. Barney (2002, p339)), building on Williamson, suggests this is prone to limitations such as subtle (contractually ambiguous) cheating,

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15 The presence of financiers in the PB negotiations of PFI projects (see section 4.11) adds a level of complexity to the bilateral trading condition, it does not constitute specific trilateral governance.

16 PFI contracts, due to their one off frequency, are located in the alliancing zone of RC in that they provide "non-adversarial incentive arrangements for the coalition members in a single project" (Winch, 2002). This is managed in PFI through a non-equity alliance between the PFI Co. and client where the cooperative relations are organised in the contractual form of a supply agreement.

either by not becoming public knowledge, or if it does enter the public realm, having enough ambiguity so as to discredit its reliability. Also, Barney suggests a correlation between the level of an economies development and the speed and accuracy of information transfer. PFI partly offsets the potential reputation effect problems associated with a new and 'low frequency' system, by attracting participants from an established and highly developed construction and financial industry base. Also, While frequency was low with particular PFI clients, the potential high frequency of transaction with the PFI market generally is a strong disincentive to opportunism, such that the value of unambiguous cheating in one project / contract is insignificant in comparison to the value of engaging in future PFI projects.

[3] RESULTS

3.1 Introduction

This section presents, as a dataset table, the results of the benchmarking exercise outlined in section 1.5.3, together with supporting comparative PFI market frequency analysis.

3.2 Dataset Context and Frequency

Table 3.1 below presents comparative analysis showing that the ninety projects that comprise the dataset represent just over 13% of the total PFI projects signed as of December 2004, including projects in the UK outside of England and non-construction projects (which were not part of the report scope). When including only the four sectors examined, the sample represents over a third of all projects. At the sector level a quarter of healthcare projects, a third of education projects, three quarters of custodial projects and 71% of Highways Agency projects are represented. When examined in capital value terms the dataset's representation is comparatively higher at the sectorial level, but slightly lower in total.

Sector	No. of Projects in Dataset	Total No. of Signed Projects*	No. of Projects in Dataset as % of Total No. of Signed Projects	Capital Value @ FC of Dataset (£m)	Capital Value @ FC of Total Signed Projects (£m)*	Capital Value of Projects in Dataset as % of Total Capital Value of Signed Projects
Healthcare	35	136	25.74%	2727.8	4901.2	55.66%
Education	36	121	29.75%	1214.62	2922.8	41.56%
Custodial	9	12	75.00%	457.5	533.5	85.75%
Roads	10	14	71.43%	908.8	1989	45.69%
Subtotal ^	*90*	*283*	*31.80%*	*5308.72*	*10346.5*	*51.31%*
Total #	***90***	***677***	***13.29%***	***5308.72***	***42699.2***	***12.43%***

**Source: HM Treasury PFI Signed Projects List December 2004*

(includes non-construction PFI projects & Wales, Scotland &Northern Ireland)

http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm

^ Total of the four sectors included in the report scope

(includes non-construction PFI projects & Wales, Scotland &Northern Ireland)

 # Total of all PFI signed projects (includes non-construction PFI projecsts & Wales, Scotland and Northern Ireland)

Table 3.1 Dataset & Total PFI Market Project Frequency Comparison

3.3 Dataset

The following three pages present the dataset, partitioned by sector.

DATA SOURCE BY CODE	SECTOR	COMMISSIONING BODY	PROJECT TITLE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)	NPV @ PB (£m)	UNITARY CHARGE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	UNITARY CHARGE @ FINANCIAL CLOSE (£m)	% CHANGE PB to FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	OJEC-FC DURATION (days)	PB-FC AS % OF OJEC to FC DURATION	PFI Co. / CONSORTIA
A	Healthcare	Norfolk and Norwich Health Care NHS Trust	—	Feb-95	Jan-96	-	-	28.8	Jan-98	158.0	-	35.3	22.46%	359	714	1073	67%	Octagon Healthcare: John Laing Construction
A	Healthcare	County Durham & Darlington Acute Hospitals NHS Trust	—	Dec-94	Apr-96	-	-	14.7	Mar-98	61.0	-	12.0	-18.42%	497	719	1216	59%	Consortium: Balfour Beatty, ntial Healthcare, Royal
A	Healthcare	Queen Elizabeth Hospital NHS Trust	—	Mar-95	Feb-96	-	-	15.4	Jul-98	96.1	-	17.3	12.83%	358	860	1218	71%	Company (MHC): Laing Investments, Innisfree
A	Healthcare	Calderdale and Huddersfield NHS Trust	-	Jul-95	Sep-96	-	-	17.5	Jul-98	64.6	-	14.5	-17.14%	436	687	1123	61%	Catalyst: Bovis Lendlease, ISS Mediclean,
A	Healthcare	South Manchester University Hospitals NHS Trust	—	Apr-95	Apr-96	-	-	12.0	Aug-98	66.7	-	11.5	-3.68%	366	859	1225	70%	Healtcare Ltd Consortium: WS Atkins, Alfred
A	Healthcare	Worcestershire Acute Hospitals NHS Trust	—	Jul-95	Sep-96	-	-	15.6	Mar-99	86.6	-	18.3	17.70%	446	910	1356	67%	Catalyst Healthcare (Bovis Lendlease,)
A	Healthcare	Hereford Hospitals NHS Trust	—	Jul-95	Jan-96	-	-	9.5	Mar-99	64.1	-	9.5	0.50%	184	1185	1369	87%	Alfred McAlpine,WS Atkins, Taylorplan,Sodexho
A	Healthcare	South Tees Acute Hospital NHS Trust	—	Mar-95	Apr-99	-	-	20.3	Aug-99	121.9	-	21.9	7.88%	1497	132	1629	8%	Consortium: Mowlem, Carillion, Innisfree, Barclays
A	Healthcare	Swindon & Marlborough NHS Trust	—	Oct-94	Jul-95	-	-	8.6	Oct-99	100.2	-	10.9	27.28%	273	1557	1830	85%	Carillion
A	Healthcare	King's College Hospital NHS Trust	—	Jul-95	Dec-97	-	-	6.4	Dec-99	75.5	-	7.2	11.99%	884	738	1622	45%	Skanska, Costain
A	Healthcare	Leeds Mental Health Teaching NHS Trust	—	Oct-96	Feb-98	-	-	9.1	Mar-00	47.0	-	8.1	-10.56%	488	759	1247	61%	Housing Association, Balfour Wiltshire, Carillion
A	Healthcare	St George's Healthcare NHS Trust	—	Mar-96	Apr-99	-	-	6.8	Mar-00	46.1	-	6.8	0.00%	1107	354	1461	24%	Noble PFI Fund, MJ Gleeson Group,
B	Healthcare	University College London Hospitals NHS Trust	—	Oct-95	Sep-96	153.00	-	-	Jul-00	225.0	-	-	47.06%	329	1392	1721	81%	Group: AMEC Project Investments, Interserve,
B	Healthcare	Northumbria Health Care NHS Trust	—	May-96	Jul-00	17.82	-	-	Nov-00	17.8	-	-	0.00%	1523	137	1660	8%	Noble PFI Fund, MJ Gleeson Group,
A	Healthcare	West Middlesex University Hospital NHS Trust	—	Sep-98	Feb-00	-	-	8.6	Jan-01	125.0	-	8.9	3.26%	538	344	882	39%	(Bouygues UK, Ecovert FM, HSBC)
B	Healthcare	Northumbria Health Care NHS Trust	—	May-99	Jun-00	29.10	-	-	Apr-01	29.1	-	-	0.00%	397	330	727	45%	Catalyst: Bovis Lendlease, Bank of Scotland
A	Healthcare	Dudley Group of Hospitals NHS Trust	—	Sep-98	Apr-00	-	-	27.5	May-01	137.0	-	26.0	-5.57%	589	384	973	39%	Robert McAlpine, Building & Property Group
B	Healthcare	South Durham Health Care NHS Trust	—	N/A	Jan-00	6.50	-	-	May-01	9.0	-	-	38.46%	N/A	496	N/A	N/A	Projects Ltd Consortium: Clugstons, Royal Bank of
B	Healthcare	Nuffield Orthopaedic NHS Trust	—	Oct-99	Feb-01	33.07	-	-	Nov-01	35.3	-	-	6.68%	478	291	769	38%	Barclays, Morrison, Group 4)
B	Healthcare	Gloucestershire Royal NHS Trust	—	Apr-00	Jul-01	32.00	-	-	May-02	32.0	-	-	0.00%	459	292	751	39%	Partnership (SPV backed by Bilfinger Berger BOT ltd
B	Healthcare	North Durham Healthcare NHS Trust	—	N/A	Mar-01	10.39	-	-	May-02	10.4	-	-	0.10%	N/A	407	N/A	N/A	Robertson Group, Bank of Scotland
B	Healthcare	Cornwall Healthcare NHS Trust	—	Jan-00	Sep-01	8.30	-	-	Jun-02	8.6	-	-	3.07%	605	250	855	29%	Ryhurst
B	Healthcare	Leeds Teaching Hospitals NHS Trust	—	N/A	Dec-02	14.00	-	-	Sep-03	14.1	-	-	0.71%	N/A	293	N/A	N/A	HBG
B	Healthcare	The Whittington NHS Trust	—	May-00	Nov-01	25.00	-	-	Oct-02	31.9	-	-	27.60%	535	341	876	39%	Jarvis
B	Healthcare	Sandwell & West Birmingham NHS Trust	—	Nov-00	Dec-01	24.00	-	-	Dec-02	26.1	-	-	8.75%	382	373	755	49%	Jarvis
B	Healthcare	East Lancashire Hospitals NHS Trust	—	May-00	Oct-01	95.90	-	-	Jul-03	109.6	-	-	14.29%	522	632	1154	55%	Balfour Beatty HSBC, Charterhouse
B	Healthcare	Doncaster & South Humber Healthcare NHS Trust	—	N/A	Jul-02	10.00	-	-	Aug-03	12.1	-	-	21.00%	N/A	397	N/A	N/A	Albion Healthcare
B	Healthcare	Southern Derbyshire Acute Hospitals NHS Trust	—	Jun-00	Aug-02	300.00	-	-	Sep-03	333.0	-	-	11.00%	773	396	1169	34%	Skanska, Innisfree
B	Healthcare	East Lancashire Hospitals NHS Trust	—	N/A	May-03	27.20	-	-	Oct-03	30.1	-	-	10.66%	N/A	159	N/A	N/A	Lendlease, Uberior Infrastructure Ltd (Bank of
B	Healthcare	North West London Hospitals NHS Trust	—	Mar-02	Jan-03	65.00	-	-	Nov-03	69.5	-	-	6.62%	279	308	587	52%	Bouygues HSBC Macquarie
B	Healthcare	Oxford Radcliffe Hospitals NHS Trust	—	Jul-01	Jan-03	125.00	-	-	Dec-03	134.0	-	-	7.20%	526	345	871	40%	(Carillion, The Royal Bank of Scotland)
B	Healthcare	Stoke Mandeville Hospital Buckinghamshire NHS Trust	—	Apr-99	Apr-02	30.20	-	-	Jun-04	39.6	-	-	31.13%	1087	783	1870	42%	Alfred McAlpine, Gardner Merchant Services,
B	Healthcare	Lewisham Hospital NHS Trust	—	Jun-02	May-03	47.00	-	-	Jul-04	58	-	-	23.40%	305	427	732	58%	Mowlem
B	Healthcare	Leeds Teaching Hospital NHS Trust	—	Oct-01	Sep-03	220.00	-	-	Oct-04	220.0	-	-	0.00%	707	386	1093	35%	Catalyst Healthcare (Bovis Lendlease,)
B	Healthcare	Kingston Hospital NHS Trust	—	Feb-01	Apr-03	28.00	-	-	Nov-04	33.0	-	-	17.86%	790	571	1361	42%	Prime Health Consortium (Costain and Equion)

Data Source Key:

Base data for commissioning body, project title, project date and capital value of financial close provided by HM Treasury PFI Signed Projects List

http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm

Base data for Project Co. / Consortia and OJEC provided by Partnerships UK PFI project database

http://www.partnershipsuk.org.uk/projectsDatabase/projectshome.html

A *Data for date of OJEC, date of preferred bidder, and capital value at preferred bidder provided by DoH Capital Investment Branch (PFU)*

B *Data for date of OJEC, date of preferred bidder, and capital value at preferred bidder provided by individual NHS Trusts*

DATA SOURCE BY CODE	SECTOR	COMMISSIONING BODY	PROJECT TITLE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)	NPV @ PB (£m)	UNITARY CHARGE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	UNITARY CHARGE @ FINANCIAL CLOSE (£m)	% CHANGE PB to FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	OJEC-FC DURATION (days)	PB-FC AS % OF OJEC to FC DURATION	PFI Co. / CONSORTIA
C	Education	Dorset CC	Colfox School	Jul-96	Feb-97	13.80		-	Nov-97	15.6	-	-	13.04%	217	288	505	57%	Jarvis
C	Education	Kingston Upon Hull	Victoria Dock Primary School	Mar-97	Sep-97		2.49	-	Jul-98	3.9	2.90	-	16.21%	184	303	487	62%	Sewell Group.
C	Education	Waltham Forest LB	Lamas Community School	Dec-98	Sep-99	13.00	-	-	Feb-00	18.5	-	-	42.31%	274	153	427	36%	Innisfree, Wates Construction
C	Education	Manchester City Council	Temple School	Oct-96	Dec-97	3.21	-	-	Mar-00	3.7	-	-	15.16%	398	821	1219	67%	Mill Group; Norwich Union PPP
C	Education	Torbay Council	Two rebuild schools project	Aug-98	Oct-99	14.20	-	-	Mar-00	20.45	-	-	44.01%	425	126	551	23%	Jarvis Plc
C	Education	East Sussex CC	Group schools	Aug-98	Aug-99	16.80	-	-	Mar-00	9	-	-	13.10%	368	213	581	37%	HBG Projects Ltd, Emcor Facilities Ltd
C	Education	Sheffield City Council	Group schools Phase 1	Jun-98	Dec-99	52.20	-	-	Apr-00	58.8	-	-	12.64%	548	122	670	18%	Ltd: Interserve, Innisfree, InterserveFM Ltd
C	Education	Stoke on Trent LEA	Group schools	N/A	Dec-99	99.00	48.00	-	Oct-00	99	153.00	-	3.38%	N/A	330	N/A	N/A	Consortium (Balfour, Innisfree;
C	Education	Wiltshire CC	North Wiltshire Schools	Jan-99	Mar-00	35.00	-	-	Oct-00	38.8	-	-	10.86%	420	244	664	37%	Partnership: Bilfinger Berger, Group 4 Falck FM
C	Education	Wirral MBC	Nine school project	Nov-98	Sep-00	54.00	-	-	Mar-01	58.5	-	-	8.33%	691	186	877	21%	Jarvis
C	Education	Kirklees	Group schools	Mar-99	Mar-00	44.00	-	-	Mar-01	59.2	-	-	34.55%	368	392	760	52%	Jarvis
C	Education	North Yorkshire CC	Group schools	Oct-98	Feb-00	7.30	-	-	Mar-01	7.2	-	-	-1.37%	488	423	911	46%	Concordat: Accord Plc
C	Education	Lancashire CC	Fleetwood High School	Apr-99	Jan-00	13.10	-	-	Mar-01	13.4	-	-	2.29%	275	455	730	62%	Eric Wright Group, Sodexho
C	Education	Kent CC	Swanscombe Community Schools	Apr-99	Apr-00	11.60	-	-	May-01	11.6	-	-	0.00%	360	418	778	54%	New Schools: Innisfree, WS Atkins, Wates
C	Education	Redbridge LB	Oaks Park School	Nov-99	Dec-00	20.00	-	-	Jul-01	20	-	-	0.00%	396	238	634	38%	Norwich Union PPP
C	Education	Sunderland CC	Sandhill View School	Jan-00	Nov-00	16.66	-	-	Aug-01	17.37	-	-	4.26%	308	286	594	48%	Jarvis Plc, Barclays
C	Education	Liverpool City Council	Group schools	May-99	Apr-01	76.00	-	-	Sep-01	76	-	-	0.00%	726	155	881	18%	Jarvis Plc, Barclays
C	Education	Essex CC	Tendring Schools	N/A	Dec-00	14.00	-	-	Oct-01	14	-	-	0.00%	N/A	320	N/A	N/A	(Tendring) ltd Consortia: Kier Group Plc, Dexia
C	Education	Southampton City Council	Group schools	Feb-00	May-01	42.60	-	-	Oct-01	42.6	-	-	0.00%	478	158	636	25%	Interserve Plc and Bank of Scotland
C	Education	Leeds City Council	Leeds 1 Seven schools	Mar-99	Jul-00	35.00	-	-	Oct-01	45.2	-	-	29.14%	487	487	974	50%	(Mowlem, Edison Capital Europe Ltd)
C	Education	Dudley MBC	Paragon Project	Oct-00	Jul-01	22.00	-	-	Jan-02	22	-	-	0.00%	268	213	481	44%	King Sturge, Wiltshires FM, Ballast & Noble
C	Education	Bolton MBC	Castle Hill Primary School	Jul-00	May-01	10.10	-	-	Apr-02	10.7	-	-	5.94%	290	346	636	54%	Melville Dundas Ltd
C	Education	Tower Hamlets LB	Mulberry School	May-98	Jul-00		-	1.53	May-02	17.4	-	1.86	21.57%	810	665	1475	45%	(HBOS, Parkwood Holdings, Miller
C	Education	Tameside LEA	Hattersley schools	May-99	Dec-00	16.80	-	-	Jun-02	20.9	-	-	24.40%	580	547	1127	49%	The Pyramid Consortium (Interserve)
C	Education	Tower Hamlets LB	Group schools	Sep-98	Nov-00		-	9.62	Jun-02	88.5	-	11.36	18.09%	775	597	1372	44%	Babcock Brown/Ballast
C	Education	Cheshire LEA	Group schools	Jan-01	Jun-01	17.20	-	-	Oct-02	17.2	-	-	0.00%	168	500	668	75%	Eric Wright Group
C	Education	Merton LB	Group schools	Mar-00	Aug-01	56.00	-	-	Nov-02	56.6	-	-	1.07%	518	481	999	48%	(WS Atkins, Innisfree, Wates, West LLB)
C	Education	Northamptonshire	Group schools	Oct-01	Nov-02	25.00	-	-	Mar-03	23.7	-	-	-5.20%	396	147	543	27%	Kajima Europe
C	Education	Newham LB	Joint Schools PFI (with Enfield)	Aug-01	Jun-02	28.80	-	-	Sep-03	30	-	-	4.17%	323	461	784	59%	Union PPP, Skanska, Chesterton Education
C	Education	Camden, LB	Haverstock Schoo	Apr-02	Mar-03	21.00	-	-	Oct-03	20.9	-	-	-0.48%	305	235	540	44%	Kajima
C	Education	Bedfordshire	Mid-Bedfordshire upper schools project	Sep-01	Jan-02	22.00	-	-	Dec-03	24.2	-	-	10.00%	132	710	842	84%	Partnership:Bilfinger Berger, Galliford
C	Education	Waltham Forest LB	Grouped schools project	Aug-02	Aug-03	50.00	-	-	Mar-04	53.6	-	-	7.20%	384	208	592	35%	Consortia: Kier Group Plc, Dexia Public Finance
C	Education	Sheffield City Council	Group schools Phase 2	May-00	Sep-02	30.00	-	-	Mar-04	31.6	-	-	5.33%	850	565	1415	40%	Prorgate Consortium
C	Education	Leeds City Council	Leeds 2 Ten Primary Schools	Mar-03	Jan-04	35.70	-	-	Apr-04	35.7	-	-	0.00%	325	93	418	22%	QED: Wates, Innisfree, HBS
C	Education	Croydon	Ashburton School	Feb-02	Jun-03	21.78	-	-	May-04	21.8	-	-	0.09%	482	350	832	42%	Jarvis Projects
C	Education	Leeds City Council	Leeds Combined Secondary Schools	Dec-03	Feb-05	97.00	-	-	Apr-05	97	-	-	0.00%	434	43	477	9%	Union PPP Fund), Carillion, Mitie

Data Source Key:
Base data for commissioning body, project title, project date and capital value at financial close provided by HM Treasury PFI Signed Projects
http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm
Base data for Project Co. / Consortia and OJEC provided by Partnerships UK PFI project database
http://www.partnershipsuk.org.uk/projectsDatabase/projectshome.html
C *Data for date of OJEC, date of preferred bidder, and capital value at preferred bidder provided by individual Local EducationAuthorities*

DATA SOURCE BY CODE	SECTOR	COMMISSIONING BODY	PROJECT TITLE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)*	NPV @ PB (£m)	UNITARY CHARGE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	UNITARY CHARGE @ FINANCIAL CLOSE (£m)	% CHANGE PB to FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	OJEC-FC DURATION (days)	PB-FC AS % OF OJEC to FC DURATION	PFI Co. / CONSORTIA
D	Custodial	Prison Service	HMP Altcourse	Nov-93	May-95		252.00	-	Dec-95	88	247.00	-	-1.98%	546	233	779	30%	Group 4, Carillion Societie General
D	Custodial	Prison Service	HMP Parc	Nov-93	May-95		254.00	-	Jan-96	74	266.00	-	4.72%	546	248	794	31%	Custodial Services Costain), Group 4
D	Custodial	Prison Service	HMP Lowdham Grange	Jan-96	Jul-96		127.00	-	Nov-96	32	137.00	-	7.87%	206	105	311	34%	Premier: Kvaerner/Skanska
D	Custodial	Prison Service	HMP & YOI Ashfield	Mar-97	Nov-97		121.00	-	Jun-98	30.7	121.00	-	0.00%	271	214	485	44%	Premier: Kvaerner/Skanska
D	Custodial	Prison Service	HMP Forest Bank	Mar-97	Nov-97		197.00	-	Jul-98	38.6	197.00	-	0.00%	271	217	488	44%	UKDS: Tilbury Douglas (Interserve)
D	Custodial	Prison Service	HMP Rye Hill	Jan-98	Dec-98		154.00	-	Jul-99	34.7	154.00	-	0.00%	334	233	567	41%	Group 4, Carillion Societie General
D	Custodial	Prison Service	HMP Dovegate	Jan-98	Dec-98		240.00	-	Sep-99	48	240.00	-	0.00%	334	297	631	47%	Premier: Kvaerner/Skanska
D	Custodial	Prison Service	HMP Ashford	Feb-00	Oct-01		206.00	-	Dec-02	47.1	219.00	-	6.31%	627	416	1043	40%	Metronet: Interserve, UKDS
D	Custodial	Prison Service	HMP Peterborough	Feb-00	Dec-01		265.00	-	Feb-03	64.4	291.00	-	9.81%	668	431	1099	39%	Services (UKDS): Interserve, Sodexho Alliance, Royal
E	Roads	Highways Agency	A69 Carlisle to Newcastle DBFO	Aug-94	Oct-95	9.4	-	-	Jan-96	9.4	-	-	0.00%	442	87	529	16%	Morrison Construction Ltd. Henry Boot Construction
E	Roads	Highways Agency	A419/A417 Swindon to Gloucester DBFO	Aug-94	Oct-95	49.00	-	-	Feb-96	49.0	-	-	0.00%	441	115	556	21%	Services (Gloucester) Ltd: AMEC, Alfred McAlpine,
E	Roads	Highways Agency	A1(M) Alconbury to Peterborough DBFO	Aug-94	Oct-95	128.00	-	-	Feb-96	128.0	-	-	0.00%	441	115	556	21%	Services (Peterborough) Ltd: AMEC, Alfred
E	Roads	Highways Agency	M1 - A1 Link Road (Lofthouse to Bramham)	Aug-94	Oct-95	214.00	-	-	Mar-96	214.0	-	-	0.00%	440	163	603	27%	Consortia: Kvaerner (Trafalgar House), BICC
E	Roads	Highways Agency	A50/A564 Stoke-Derby Link DBFO	Feb-95	Feb-96	21.00	-	-	May-96	21.0	-	-	0.00%	391	83	474	18%	(Balfour Beatty, Philip Holzmann, WS Atkins
E	Roads	Highways Agency	A30/A35 Exeter to Bere Regis DBFO	Feb-95	Apr-96	75.00	-	-	Jul-96	75.0	-	-	0.00%	447	92	539	17%	(Balfour Beatty, Philip Holzmann, WS Atkins
E	Roads	Highways Agency	M40 Junctions 1 to 15	Feb-95	Apr-96	65.00	-	-	Oct-96	65.0	-	-	0.00%	448	167	615	27%	Investments Ltd, John Laing, Tarmac Plc
E	Roads	Highways Agency	A19 Dishforth to Tyne Tunnel DBFO	Feb-95	May-96	29.40	-	-	Oct-96	29.4	-	-	0.00%	470	151	621	24%	Ltd: Amey Plc, Sir Robert McAlpine Ltd, Taylor
E	Roads	Highways Agency	A1 Darrington to Dishforth	N/A	Sep-02	245.00	-	-	Feb-03	245.0	-	-	0.00%	N/A	143	N/A	N/A	Limited Consortium (Amec, Alfred McAlpine PLC,
E	Roads	Highways Agency	A249	Mar-02	Apr-03	73.00	-	-	Feb-04	73.0	-	-	0.00%	409	297	706	42%	Carillion Design & Build, Carillion FM

Data Source Key:
Base data for commissioning body, project title, project date and capital value at financial close provided by HM Treasury PFI Signed Projects List
http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_pfi_stats.cfm
Base data for Project Co. / Consortia and OJEC provided by Partnerships UK PFI project database
http://www.partnershipsuk.org.uk/projectsDatabase/projectshome.html
D Data for date of OJEC, date of preferred bidder, and capital value at preferred bidder provided by HM Prisons Service
E Data for date of OJEC, date of preferred bidder, and capital value at preferred bidder provided by Highways Agency Private Finance Policy Procurement Directorate
** Highways Agency preferred bidder capital values accurate to within £1m, therefore creep within this may be present but undetected*

[4] RESULTS ANALYSIS

4.1 Introduction

This section begins by analysing the quantitative data set to identify the extent of price creep both as a combined market and between sectors. It then examines the reasons for price creep, looking at both the contributors and inhibitors within project factors of time, scope, complexity, risk, sunk costs, opportunism and relational contracting, identified by qualitative interviews with PFI market practitioners and with reference to quantitative data as necessary. It finishes by analysing the interaction between the factors and their relationship to price creep, leading to the establishment of a PFI price creep model.

4.2 The Extent of Price Creep

4.2.1 Univariate Means

The examination of the mean % price change between P.B. and F.C. (refer table 4.1) reveals that while the average for all projects is 7.68% (trimmed mean of 6.03%), there is grouped divergence between the sectors. Both healthcare and education have mean price change in the 9 - 9.5% range, while the custodial and roads sectors have significantly lower averages of 2.97% and 0.00% respectively.

A relatively low multisectorial median of 3.32%, suggests the presence of extreme values, most likely in the healthcare sector where the difference between the means is much less. This is confirmed by further distribution analysis in 4.2.2 below.

Univariate Mean: % Price Change P.B. to F.C. (by sector)

Sector	**Average**	**Median**	**Trimmed Mean (0.2)**
Healthcare	9.26%	7.20%	8.74%
Education	9.45%	4.80%	7.54%
Custodial	2.97%	0.00%	2.97%
Roads	0.00%	0.00%	0.00%
Multisector	7.68%	3.32%	6.03%

Table 4.1 Univariate Mean: % Price Change P.B. to F.C. (by sector)

4.2.2 Distribution and Variance.

Distribution analysis of the complete dataset (refer fig. 4.1) shows a high clustering of projects towards the lower ranges of percentage price change, resulting in a positive skewness factor of 1.19 (refer table 4.2). The 0 – 5% range contains a significant 40% of the project population, with a steady decline of lower project frequencies in each 5% bin thereafter to give a relatively heavy tail with a Kurtosis of 1.62, and consistently low negative values.

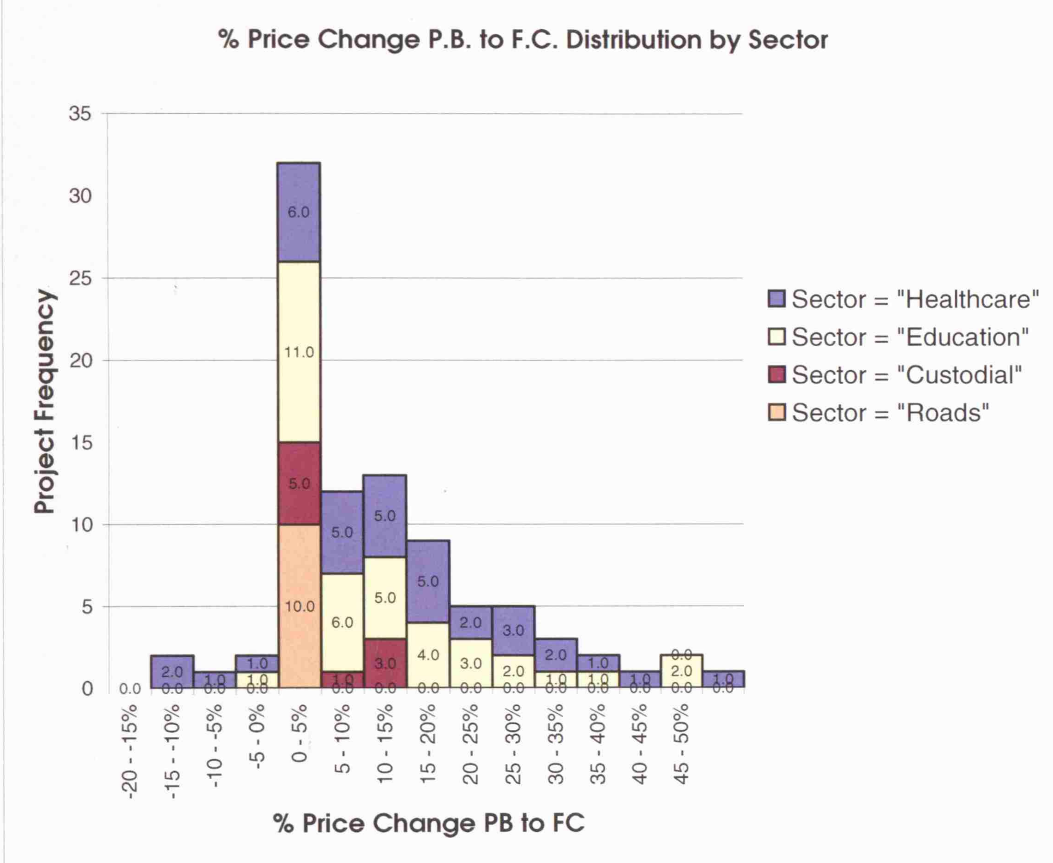

Figure 4.1 % Price Change Distribution by sector

Univariate Variance: % Price Change PB to FC (by sector)

	Min.	Max.	Range	Std. Dev.	Variance	Skewness	Kurtosis	Sample No.
Healthcare	-18.42%	47.06%	65.48%	14.48%	2.10%	0.52	0.45	35
Education	-5.20%	44.01%	49.21%	12.45%	1.55%	1.43	1.50	36
Custodial	-1.98%	9.81%	11.80%	4.26%	0.18%	0.53	-1.46	9
Roads	0.00%	0.00%	0.00%	0.00%	0.00%	0	0	10
Multisector	-18.42%	47.06%	65.48%	12.40%	1.54%	1.19	1.62	90

Table 4.2 Univariate Variance: % Price Change P.B. to F.C. (by sector)

The trend of grouped divergence between the sectors identified in section 4.2.1, is also seen in distribution and variance analysis. Healthcare (fig. 4.2) and education (fig. 4.3) both show a high range of values (from –18.42 % to 47.06% for healthcare) with heavy tails and comparatively large standard deviations. Healthcare, with skewness of 0.52, is more evenly distributed than education, which has a figure of 1.43.
The custodial (fig. 4.4) and roads (fig. 4.5) sectors in contrast have a considerably smaller range of distribution, with low accompanying figures for variance (refer table 4.2).
The significant difference between the numbers of results in the sectorial samples is an important consideration when comparing the distributions, with both the custodial and roads sectors being treated with some caution due their small numbers (9 and 10 respectively).

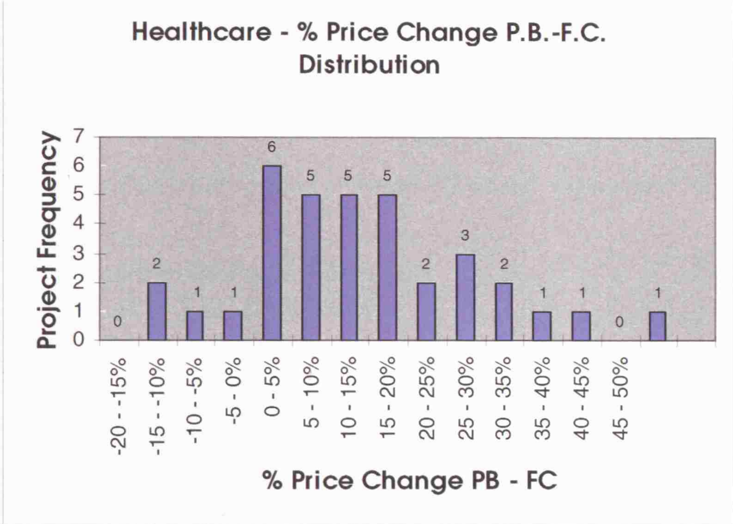

Figure 4.2 Healthcare: % Price Change P.B. to F.C. Distribution

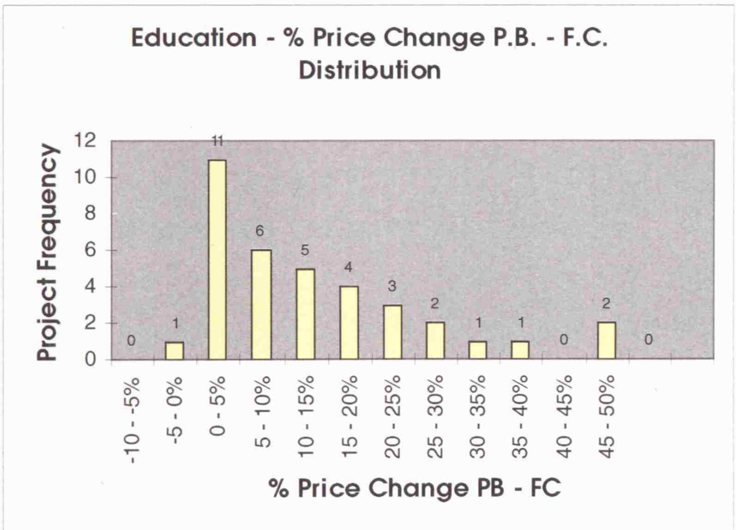

Figure 4.3 Education: % Price Change P.B. to F.C. Distribution

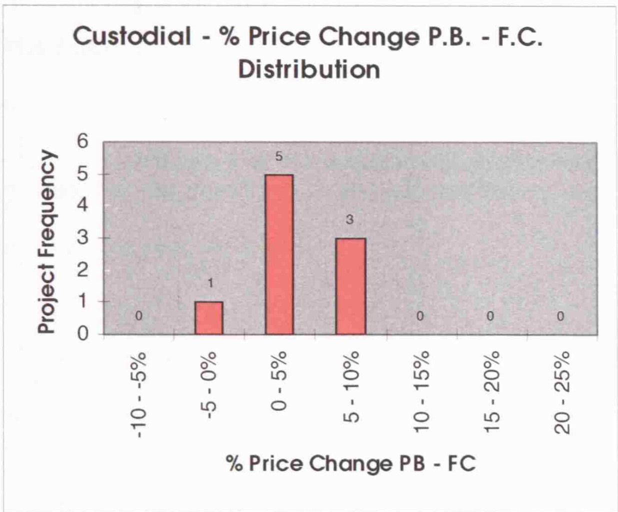

Figure 4.4: Custodial: % Price Change P.B. to F.C. Distribution

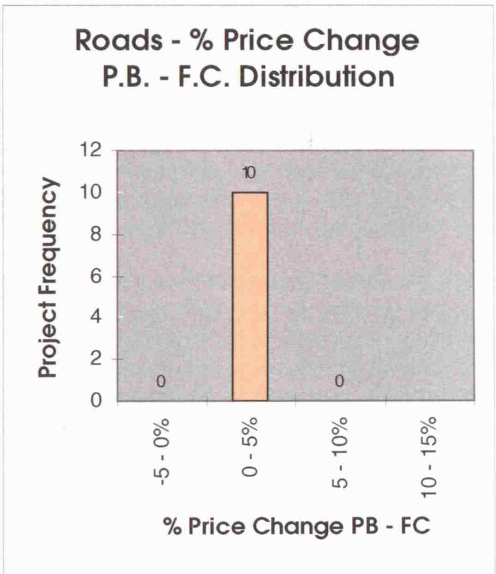

Figure 4.5 Roads: % Price Change P.B. to F.C. Distribution

4.3 Time Factors

4.3.1 Historical Trends

The first hypothesis is that there should be an observable reduction in price creep over time as a result of organisational learning in a maturing market.

$H_0 = \Delta P_{FC\text{-}PB}(t_{n-1}) \leq \Delta P_{FC\text{-}PB}(t_n)$

$H_1 = \Delta P_{FC\text{-}PB}(t_{n-1}) > \Delta P_{FC\text{-}PB}(t_n)$

Interviewees were mixed in their support of this hypothesis. Every respondent in the private sector, and all but two respondents in the public sector, believed that there would be a reduction over time. They based this observation on personal experience of multiple projects, supplemented with general PFI market experience and dialogue. The two that refuted the hypothesis, from the Highways Agency and HM Prison service did so based on intimate knowledge of the small number of projects from their sector, but were supportive of the hypothesis in theory.

Respondents independently promoted organisational learning as an explanation for price creep reduction, believing the early PFI market were learning as they were going, which resulted in problems being encountered and solved often during the P.B. stage. In these situations time delay to F.C., large scope changes and big risk provisions, as well as public sector optimism bias, resulted in consistent price creep. This was accentuated by government strategy of trying different kinds of projects within each sector to test for PFI suitability e.g. the education pathfinder schemes.
All interviewees believed that learning effects were occurring within their organisations. These vary in their characteristics depending upon a number of factors relating to organisational structure size and type as outlined in appendix D.

The introduction of Standard Procurement documentation, and Standardised Contracts particularly, was seen as the primary element leading change.[17] Standardisation provided increased certainty for both public and private sectors, reducing the time spent negotiating by 'closing down' standard PFI issues very early in the process, and reducing the reliance placed on advisors. More recently the focus has shifted to the refinement of the P.B. letter. This is an attempt to introduce more formalised scope prior to the P.B. negotiation stage.

Analysis of the data identifies considerable differences between the sectors with regard to the % price change P.B. to F.C. over time. When the sectors are combined (refer fig.4.6) no reduction trend is evident. This may be explained by examining the influence of the sectors individually (fig. 4.7). With no reported price creep in any project, the road sector shows a straight-line trend at 0%, with a cluster of early values between 1996 and 1997. This supports the Highways Agency's disagreement with the hypothesis. The custodial sector is also responsible for the early results, following a slightly increasing linear trend over time, with a polynomial tendency, and generally low values (-2% - 10%). When combined, these two sectors, although contributing comparatively few results, are responsible for all the low early figures that assist flattening the overall trend line. When the overall yearly averages are analysed (refer fig. 4.8), the linear trend line shows increased positive correlation (increasing average price creep) and a strong polynomial shape.

The education sector, in contrast shows a clear decreasing trend through time, which is even more pronounced when the yearly percentage averages are used (refer fig.4.9). The healthcare sector provides the biggest surprise by demonstrating no trend for price creep

17 The introduction of standardised contracts was not uniform over the different PFI sectors, but instead resulted from the sectorial PFI policy and guidance units supported by government organisations such as the Treasury Taskforce and Partnerships UK.

reduction over time, rather, when the yearly average is analysed (refer fig. 4.10) there is a strong trend for increased price creep, confounding both the hypothesis and interviewee supposition.[18]

Therefore, while the hypothesis of observable price creep reduction over time is accepted for the education sector, it is rejected in the remaining sectors and for the sample as a whole.

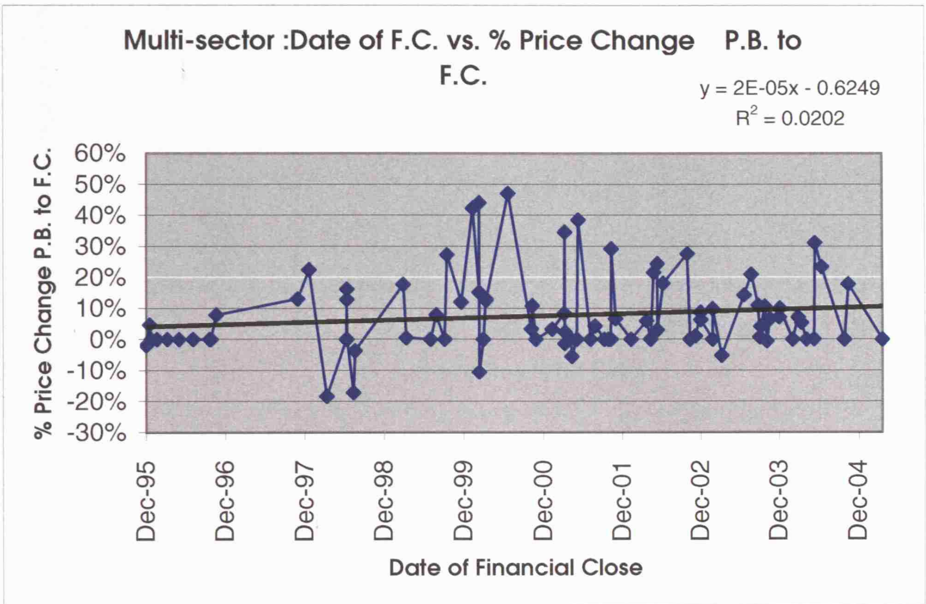

Figure 4.6 Multi-sector: Date of Financial Close vs. % Price Change P.B. to F.C.

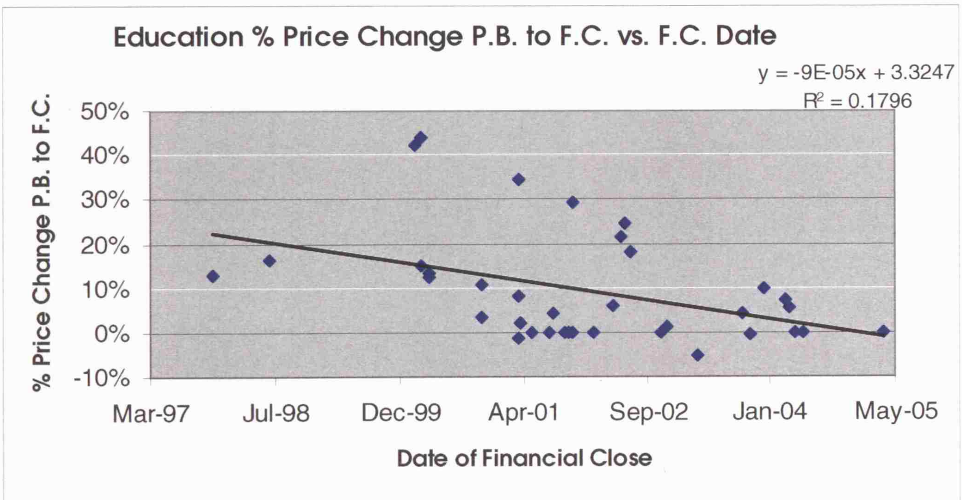

Figure 4.7a Education Date of Financial Close vs. % Price Change P.B. to F.C

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18 A possible explanation for this finding may relate to affordability constraints being tighter in the early years for the healthcare sector, which would result in the downward scoping of projects post PB in those years. This would account for the negative values prior to 2001 that have assisted in the positive (increasing) trend line.

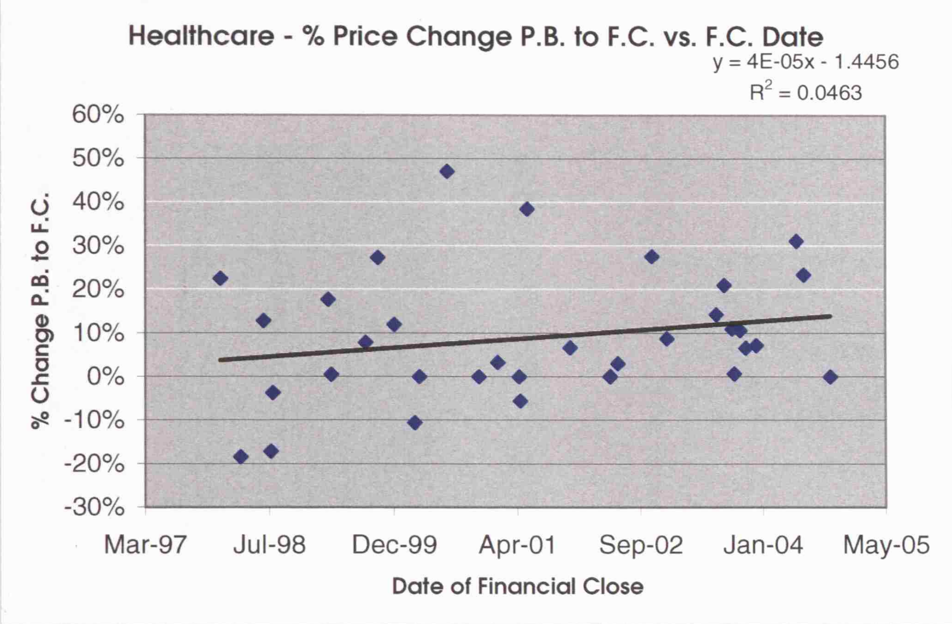

Figure 4.7b Healthcare Date of Financial Close vs. % Price Change P.B. to F.C

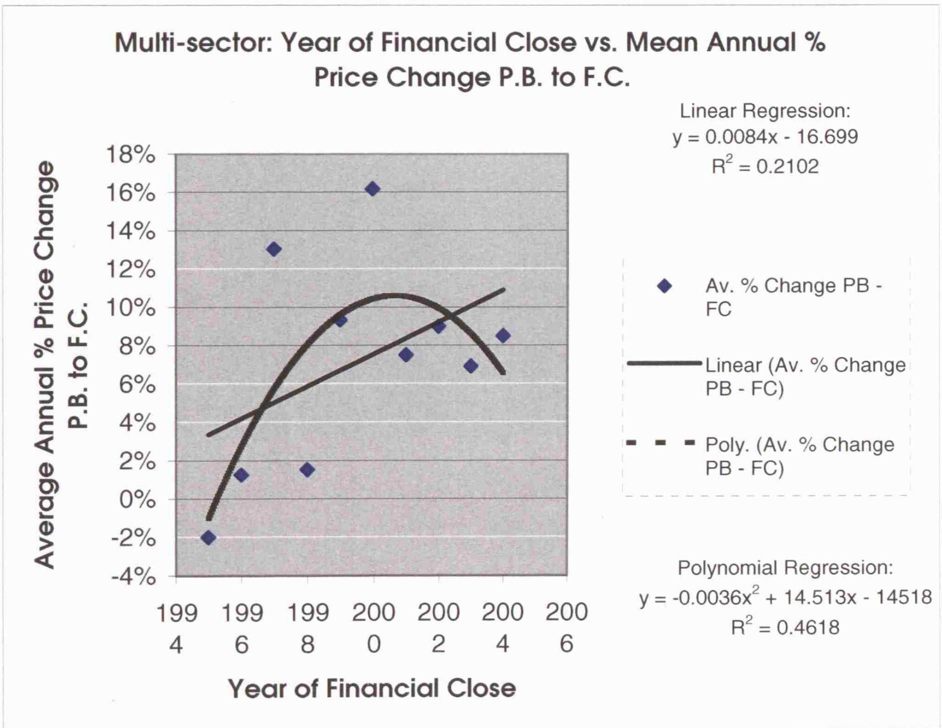

Figure 4.8 Multi-sector: Year of Financial Close vs. Average% Price Change P.B. to F.C.

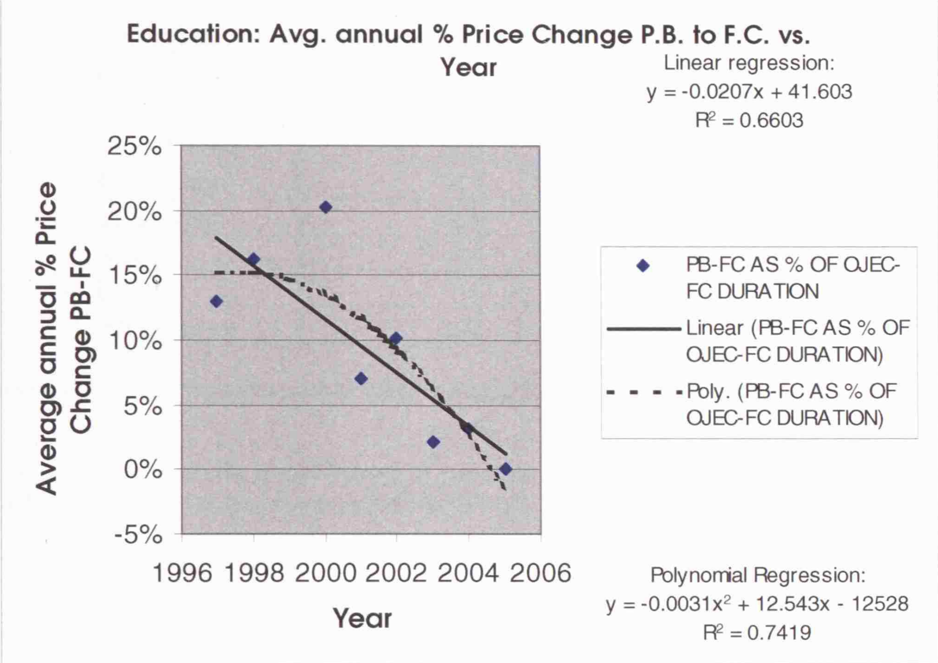

Figure 4.9 Education: Year of Financial Close vs. Average% Price Change P.B. to F.C.

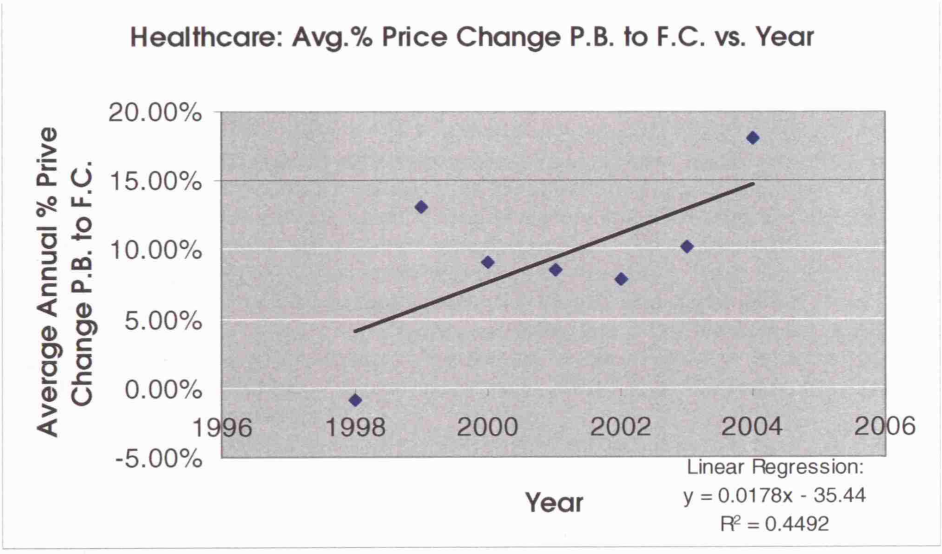

Figure 4.9 Healthcare: Year of Financial Close vs. Average% Price Change P.B. to F.C.

4.3.2 Preferred Bidder Duration and Inflation

Table 4.3 below shows the mean values for P.B. duration. It shows distinct differences between the sectors from Healthcare with the longest mean P.B. duration of 549 days, to roads with the shortest at 141 days. While education, custodial and roads have a median of a similar value to the average and trimmed mean, healthcare shows a large disparity, indicating the presence of a number of considerably higher values.

Univariate Means: Preferred Bidder Duration (days)

	Average	Median	Trimmed Mean (0.2)
Healthcare	549	397	505
Education	341	312	328
Custodial	266	233	266
Roads	141	129	129
Multisector	392	330	352

Table 4.3 Univariate Means: Preferred Bidder Duration by sector

The second hypothesis is that there is a correlation between the duration of the preferred bidder stage and price creep within that stage.

$H_0 = \Delta P_{FC\text{-}PB} (t_{n-1})$ *is not correlated to* $t_{FC\text{-}PB}$

$H_1 = \Delta P_{FC\text{-}PB} (t_{n-1})$ *is correlated to* $t_{FC\text{-}PB}$

While interviewees considered duration as more significant in driving bid costs up, they nonetheless believed it played a part in price creep. [19]
The effect of preferred bidder duration on price creep is contingent upon several key factors. Firstly, it has a relationship to both scope change and complexity whereby it is usually a function of rather than driver of these two things. Secondly, its independent contribution is a product of the firm price agreed to, the associated expiry date and the inflationary specifics that attend thereafter.
It is standard practice in all sectors for the parties to enter the P.B. stage on the basis of a firm price. This price is set out in the P.B. letter and is accompanied by a set of scenarios outlining the expiry date (that varies between projects but is usually around 12 months) and the proceedure should the expiry date arrive without having reached F.C.. In the event of expiry the firm price is open to adjustment in line with a construction inflation index e.g. MIPS (the healthcare sector standard), Baxter Formula (in Civil construction). When the type of inflation index is not specified by the client, there is potential for alternative indices to be introduced by the private sector e.g. RPI (Retail Price Index), resulting in a wide variance of inflationary increase. The other avenue for inflation negotiation is around 'MIPS+ factors'. This relates to the addition of a factor representing the inflationary contribution of the servicing element, which may increase at a different rate to the construction element.
One interviewee identified another condition where the more time spent at P.B., the more time is available to review the details of the project documentation and the more problems will be found and price increase.

> *"If you have a team waiting and ready to start building the project, you have finished the design and are just awaiting conclusion of the commercial negotiation, then the construction guys will keep tracking over documentation and will find things."*
>
> Colin McPherson, Carillion

19 Apart from the Highways Agency, all sectors observed the influence of bidding duration on price creep.

The practitioner testimony above is supported by analysis of the empirical data summarised in table 4.4 below. This shows that the Healthcare and the multi-sector correlations are statistically significant (at the 5% significance level), while the custodial sector has a higher linear correlation (r=0.6)at a lesser level of significance (11.8%), with an even higher polynomial correlation (r=0.9) . The education and roads sectors show no significant correlation between P.B. duration and % price change P.B. to F.C.
Therefore, the hypothesis that there is a correlation between PB duration and price creep is rejected for the education and roads sectors, but accepted for healthcare, the custodial sector, and the sample generally.

Preferred Bidder Duration vs. % Price Change P.B. to F.C.

	Pearson Correlation (*r* - value)	Pearson Probability (*p-value*)	Spearman Rank Correlation
Healthcare	0.375	0.041	0.276
Education	0.119	0.488	0.250
Custodial	0.598	0.118	0.319
Roads	N/A	N/A	N/A
Multisector	0.308	0.005	0.314

Table 4.4 Preferred Bidder Duration vs.% Price Change P.B. to F.C. Linear Correlation Matrix

The influence of the preceding bidding phase[20] on P.B. negotiation is significant.

> *"The issue with going from P.B. to close revolves a lot about the understanding of the project and what you have managed to develop up until P.B. - in terms of the level of service provision and the design."*

There has been a shift in the ITN expectation over time, with what was previously designed and negotiated at the P.B. stage now increasingly required by the public sector prior to the selection of P.B. The private sector reaction to this is mixed. While resisting the necessity to provide more information at competitive risk, they welcome the increased clarity and competing on 'a level playing field'.
The healthcare sector client has focused on the OJEC and FITN stages particularly. While it has introduced more detail to the OBS, especially in the FM sections to cover risk transfer issues surrounding NHS statutory requirements, it is not necessarily more prescriptive in content. Instead it has made the process more prescriptive to aid clarity and transparency.[21]
All interviewees, apart from the Highways Agency, believed this contributes to reduced duration, associated scope changes and less opportunity for price creep in the P.B. stage. This trend should result in the reduction of both the P.B. duration generally, and P.B. duration as a percentage of the OJEC – F.C. period, through time.

20 ITN and BAFO

21 The Design Development Protocol (Department of Health and NHS Estates) is one example of this.

$H_0 = (t_{FC\text{-}PB})_{(n-1)} \geq (t_{FC\text{-}PB})_{(n)}$

$H_1 = (t_{FC\text{-}PB})_{(n-1)} < (t_{FC\text{-}PB})_{(n)}$

&

$H_0 = (t_{FC\text{-}PB} / t_{FC\text{-}OJEC})_{(n-1)} \leq (t_{FC\text{-}PB} / t_{FC\text{-}OJEC})_{(n)}$

$H_1 = (t_{FC\text{-}PB} / t_{FC\text{-}OJEC})_{(n-1)} > (t_{FC\text{-}PB} / t_{FC\text{-}OJEC})_{(n)}$

Analysis of the data identifies healthcare (fig4.11) as the only sector to show a tendency towards reduced P.B. duration over time, with the other sectors (figs. 4.12, 4.13, 4.14) showing increasing duration trends.

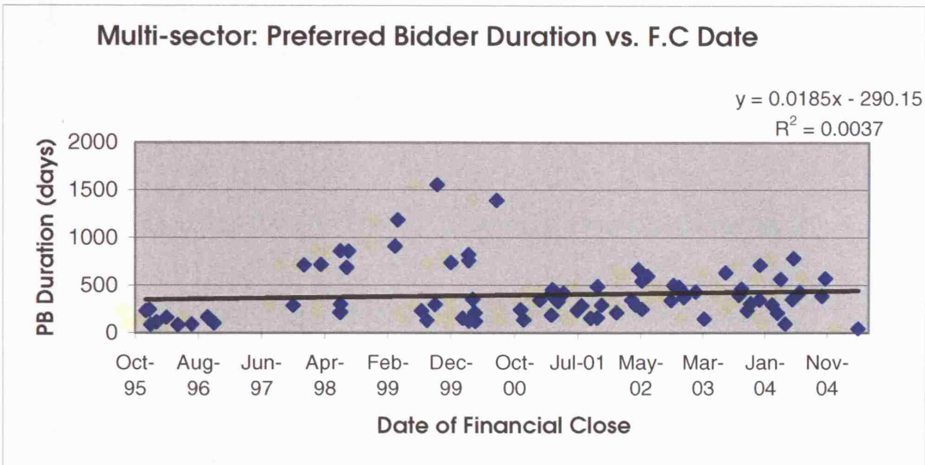

Figure 4.10 Multi-sector Preferred Bidder duration vs. Financial Close date

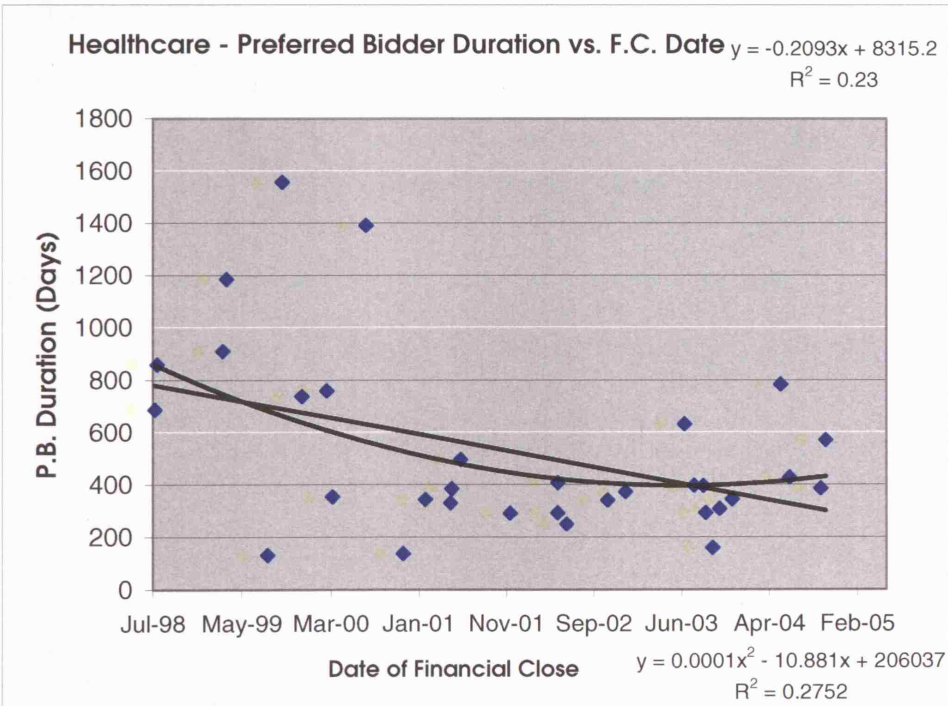

Figure 4.11 Healthcare Preferred Bidder duration vs. Financial Close date

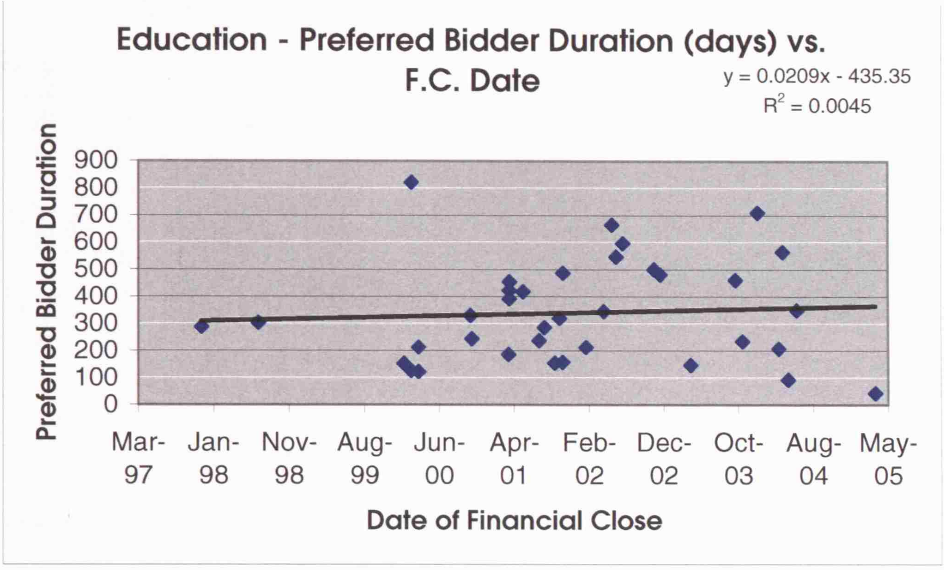

Figure 4.12 Education Preferred Bidder duration vs. Financial Close date

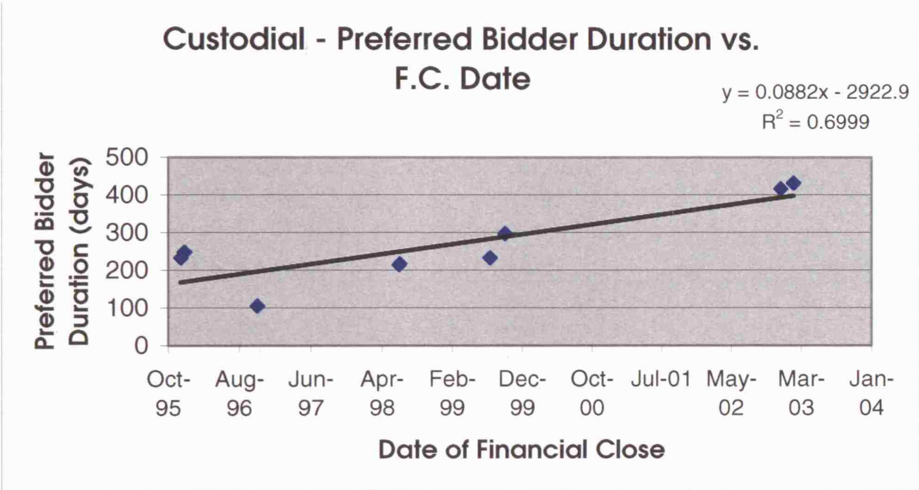

Figure 4.13 Custodial Preferred Bidder duration vs. Financial Close date

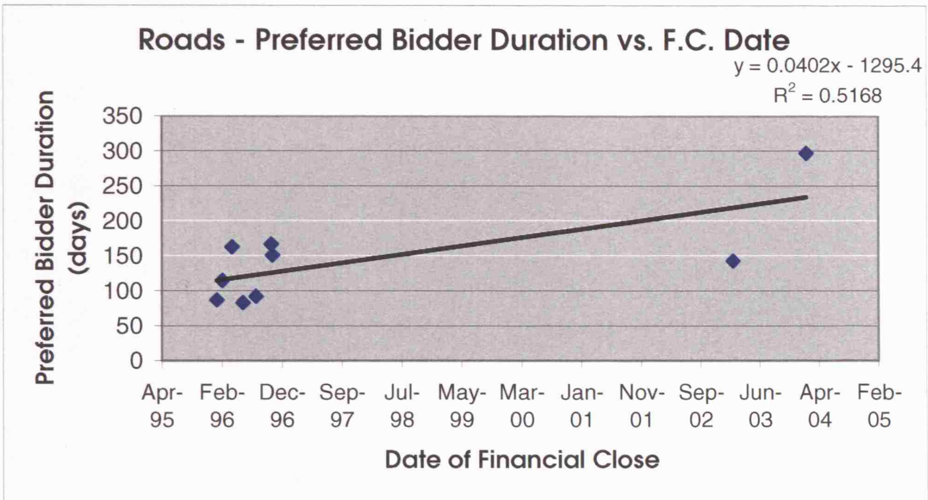

Figure 4.14 Roads Preferred Bidder duration vs. Financial Close date

Univariate Means: OJEC to P.B. Duration (days)

	Average	Median	Trimmed Mean (0.2)
Healthcare	493	493	591
Education	396	396	425
Custodial	334	334	423
Roads	441	441	437
Multisector	441	441	487

Table 4.5 Univariate Means: OJEC to P.B. Duration

Univariate Means: P.B. to F.C. as % of OJEC to F.C. Duration

	Average	Median	Trimmed Mean (0.2)
Healthcare	47.44%	45.39%	48.07%
Education	40.92%	43.52%	41.19%
Custodial	39.62%	40.49%	39.62%
Roads	23.66%	20.68%	23.66%
Multisector	42.75%	41.91%	42.02%

Table 4.6 Univariate Means: P.B. to F.C. as % of OJEC to P.B. Duration

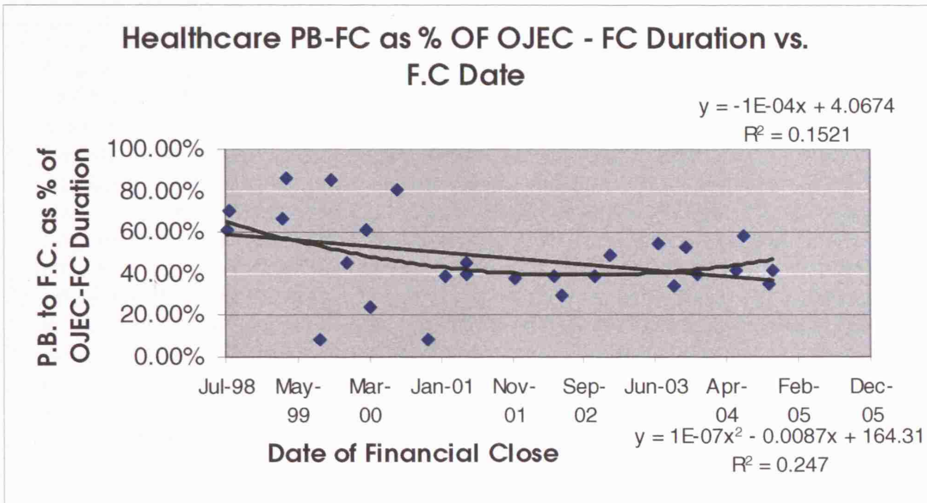

Figure 4.15 Healthcare: P.B. - F.C. as % of OJEC – P.B. Duration vs. Date of Financial Close

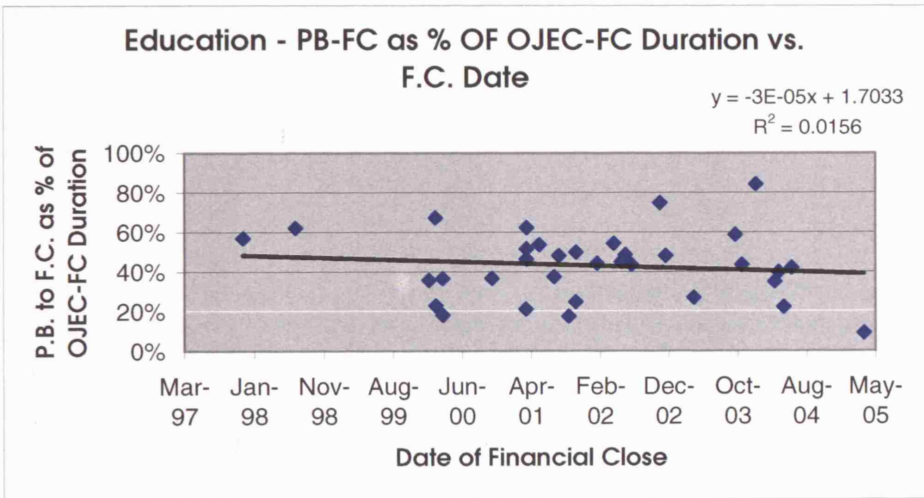

Figure 4.16 Education: P.B. - F.C. as % of OJEC – P.B. Duration vs. Date of Financial Close

Both healthcare and education (refer fig. 4.15 & 4.16) show the P.B. duration as a decreasing percentage of the OJEC – F.C. duration over time, with it increasing in both the custodial and roads sectors.

While the use of BAFO has declined, the private sector believes that it remains in the retagged form of extended clarifications, or in the MOD's case 'revise and confirm'. Bidders are interrogated quite intensely on any outstanding issues, their price, and the establishment of whether the detail provided is adequate enough for the client to understand the price differences between the bidders.[22]

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22 This is more obvious with public sector clients and projects where time is not a key driver. The MOD is a case in point. The MOD often view time as 'essentially free', certainly a lesser priority than both quality and cost in the procurement trinity. Although they view time overruns as less than ideal, they would rather live with the 'slight embarrassment of this than comparatively more serious problems of 'buying rubbish' or overspending.
"Our approach therefore is to use the bidding phase as much as possible to secure VFM and the design and delivery of a service that works, while minimising the PB negotiation phase. ... We prefer actually, to use the time before OJEC and going to market to establish as much certainty as possible about the PFI project."

> *"The lesson we learnt, but also we tried to mitigate this, was to say to the bidders, both at ITN and BAFO stages, that we were not going to progress to the next stage until we had more certainty in terms of what we were getting i.e. what the price was. Because tenders when they come in often leave some areas pretty vague - they may say 'to be advised' or 'provisional sums' or 'we have excluded this at the moment from our price' - a whole range of caveats. Now that's no good when you are trying to get to a negotiated price, and you have got to get that resolved. Now the best way to resolve that is to keep competition going for as long as you can, for once you have gone to preferred partner there is a tendency for price promptly to go up - because of those exclusions, provisional sums and caveats, or indeed changes in scope (which is on your side rather than their side to determine)... So there was a lot of discussion with our bidders around ITN stage and BAFO stage to get to a point where we were comfortable that the price was a proper price, and wasn't going to creep upwards in a large way once we had announced preferred partner"*
>
> Mike Inman, Stoke on Trent CC

The duration of this stage is often a product of how close the bidders are in price, with some private sector interviewees critical that its use is due to the public sector client's failure to decide between bidders, which is often the result of inadequate ITN documentation. Some in the private sector also sees it as the public sector's opportunity, having identified the probable P.B.,

> *"to squeeze and get everything clear in their mind that the bidder/P.B. has no 'wriggle room'. ... The public sector have people looking very closely at all the 'weasel words' and will come back and check exactly what is meant."*
>
> Colin McPherson, Carillion

The divergence of views above is part of a general tension between the public and private sectors in regard to the duration and expectations of the bidding phase. The bidding phase is underpinned by competition, so the focus of the private sector consortia is on winning the bid by providing best VFM through the best design at the lowest price, and giving the client the words they want to hear. The P.B. stage then becomes about "converting the dream into a deliverable product".

4.3.3 Month of Financial Close

Although both public and private sectors have incentive to reach F.C., the public sector drive the P.B. process and set the F.C. date. This date is influenced by a number of factors depending upon the PFI sector.

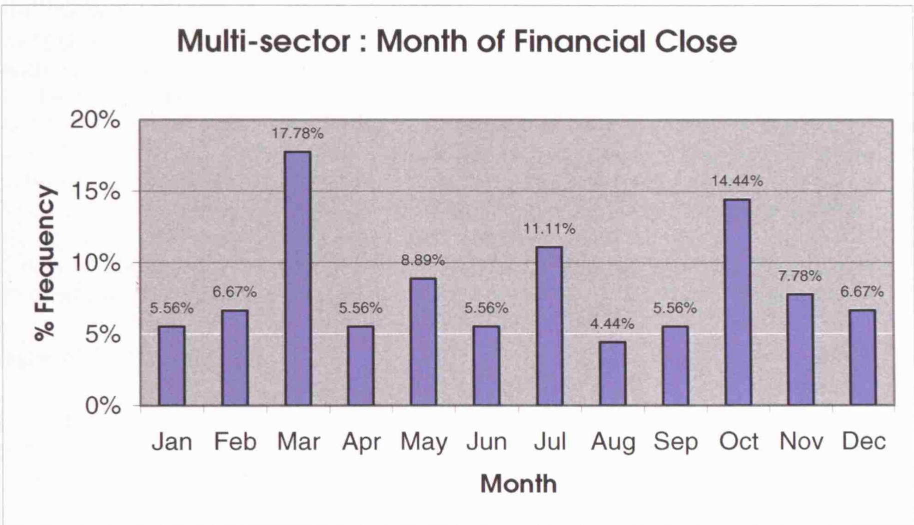

Figure 4.17 Multi-sector frequency of Financial Close by month

In the education sector, March 31st, the end of the financial year, has historically been a driver, which is reflected in nearly a third of education projects closing in March (refer fig 4.18). This related to both the interest rate and DFES credit support rate being reset at this time.[23] Therefore, there was always a rush to get education deals signed before the end of March, which resulted in excessive pressure, price creep and reduced VFM.[24] The other typical driver in education is the date of handover and operation, which usually coincides with the start of the school year in September, necessitating F.C. approximately 2 years prior.

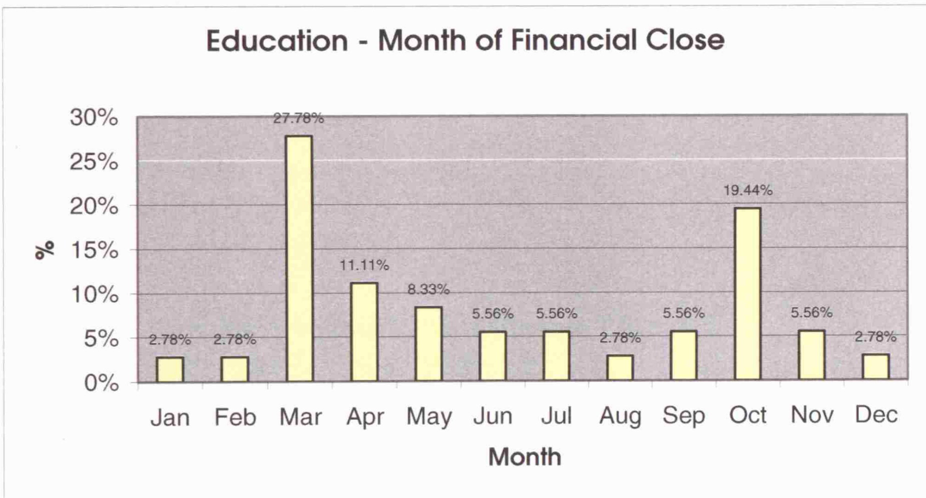

Figure 4.18 Education frequency of Financial Close by month

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23 In the Stoke on Trent Grouped Schools project, this deadline was missed, resulting in the financing rates changing which increased the cost of the project by £7m, and delayed FC six months while the situation was resolved.

24 The government has subsequently altered this condition and the March 31st date is no longer a driver.

The Highways Agency prefer to award the contract in the Autumn, giving the DBFO company the winter to do advanced works and design. While construction issues are not evident in driving MOD projects, project specific incentives do feature, such as the requirement to get a minister's signature before they go on holiday. In the healthcare sector, the recent instances of NHS Trusts applying for Foundation status has become a driver to set the F.C. date before Foundation status came in, thereby eliminating the potential for a new board to review and delay the scheme.
What is evident is the use of particular dates to create project milestones that 'concentrate the mind' and appeal to the human factor in deals. [25]
However, the education sector and various other specific projects apart, closing the deal on a critical date is not generally a primary driver, and its effect on price creep minimal.

4.4 Type of Client

Client type is defined in this report as being either centralised or decentralised in regard to organisational structure at the policy level and its relationship to the individual project. Table 4.7 below identifies how the sectors are allocated within this definition.

Client Type	Sector
Centralised	Roads, Custodial
Decentralised	Healthcare, Education

Table 4.7 Centralised / Decentralised Client- allocation by sector

The hypothesis is that there are observable differences in the mean price creep between client types, with centralised clients (C) incurring less mean price creep than decentralised clients (D).

$H_0 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (C) \geq \Delta_{(mean)}\ P_{FC\text{-}PB}\ (D)$

$H_1 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (C) < \Delta_{(mean)}\ P_{FC\text{-}PB}\ (D)$

Univariate Means: % Price Change P.B. to F.C.
Centralised /Decentralised Client

	Average	Median	Trimmed Mean (0.2)
Centralised	1.41%	0.00%	1.11%
Decentralised	9.36%	6.62%	8.06%

Table 4.8 Univariate Means: % Price Change P.B. to F.C. - Centralised / Decentralised Client

Table 4.8 supports the hypothesis above, with centralised clients showing significantly lower mean price creep than decentralised clients.

25 Another example of this is the use of the end of the calendar year and Christmas to help set a deadline, which also coincides with the accounting year of many private sector contractors. This is beneficial in regard to the consortia's end of year results and general confidence in the market.

4.5 Type of PFI Co.

4.5.1 Integrated / non-integrated

The hypothesis is that the type of PFI Co., whether they are integrated (I) or non-integrated (N), effects price creep. Integrated clients, as a result of more efficient communication networks, easier learning effect adoption and internal price manoeuvring capabilities should have lower overall mean price creep.

$H_0 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (I) \geq \Delta_{(mean)}\ P_{FC\text{-}PB}\ (N)$

$H_1 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (I) < \Delta_{(mean)}\ P_{FC\text{-}PB}\ (N)$

Univariate Means: % Price Change P.B. to F.C.
Integrated /Non Integrated PFI Co.

	Average	Median	Trimmed Mean (0.2)
Integrated	8.45%	4.26%	7.00%
Non-Integrated	7.23%	3.26%	5.76%

Table 4.9 Univariate Means: % Price Change P.B. to F.C. -Integrate/Non Integrated PFI Co.

However, table 4.9 above does not support the hypotheses, showing non-integrated PFI Cos. with slightly less (1.22%) average price creep.

4.5.2 Experienced / inexperienced

When examining the PFI Cos. individually, the hypothesis follows that due to theoretical learning effects the more experienced (f + 1) PFI Cos. would have less average price creep than the less experienced (f).[26]

$H_0 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (\text{PFI Co. A}_{(f)}) \geq \Delta_{(mean)}\ P_{FC\text{-}PB}\ (\text{PFI Co. B}_{(f+1)})$

$H_1 = \Delta_{(mean)}\ P_{FC\text{-}PB}\ (\text{PFI Co. A}_{(f)}) < \Delta_{(mean)}\ P_{FC\text{-}PB}\ (\text{PFI Co. B}_{(f+1)})$

However, this hypothesis is rejected, as no statistically significant correlation is observable between average % price creep and number of projects signed by each of the PFI Cos., as is shown in figs 4.19 and 4.20 below.

26 Experience in this scenario is defined by the frequency of PFI projects signed by the PFI Co., as compared to alternative definitions for experience such as length of time spent in the PFI market.

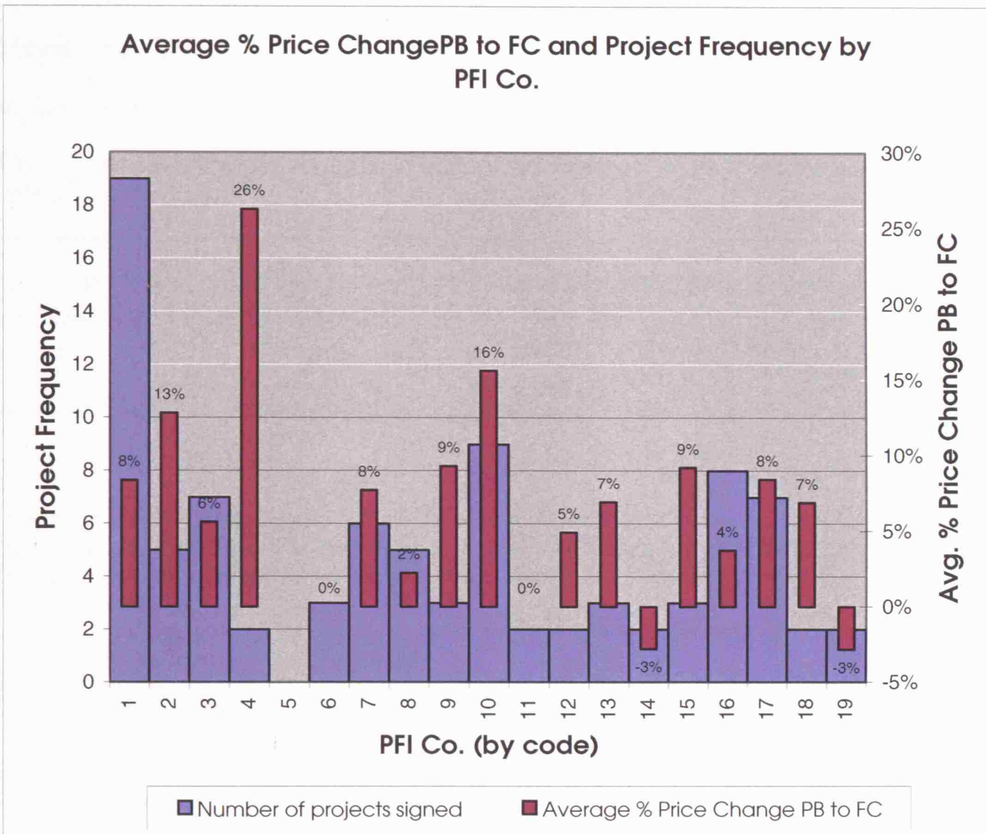

Figure 4.19 Average % price change PB to FC and Project Frequency by PFI Co.

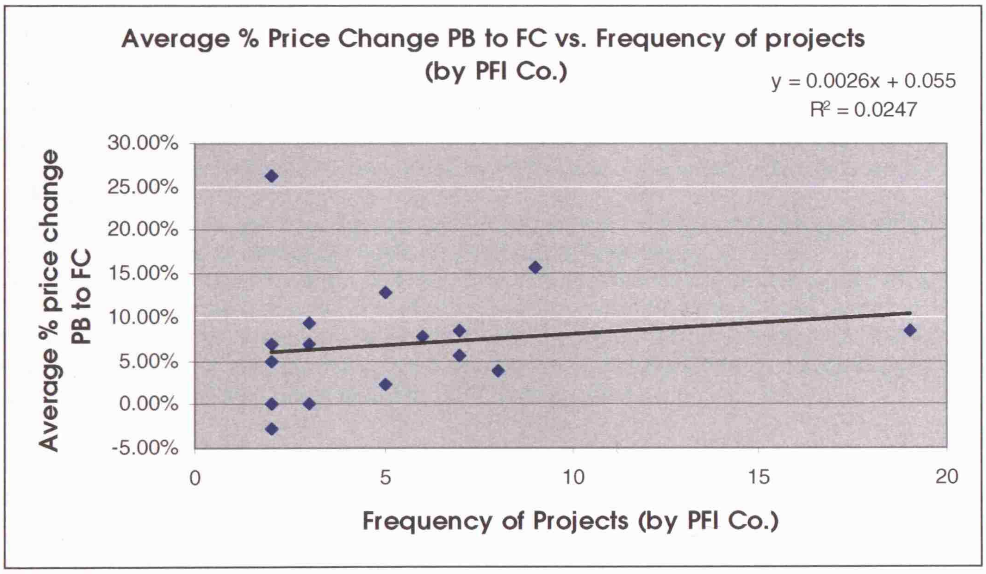

Figure 4.20 Average % Price Change P.B. to F.C. vs. Frequency of Projects (by PFI Co.).

4.6 Scope and Affordability

4.6.1 Scope Change

All interviewees identified scope change[27]as the strongest single factor related to price creep.

> *"Its like any public sector, as soon as they make any change (in scope) then there is a price change associated with that change that they hadn't budgeted for."*
>
> *Mark Mugglestone, Skanska*

They identified four main types of scope change at the P.B. stage:
a) Change introduced by the client as a result of internal (organisational) requirements.
b) Change introduced by the client in response to external (environmental / Statutory) requirements.
c) Change introduced by clarifications resulting from the detailed design information and understanding of the project.
d) Change introduced by the requirement for affordability which may be a result of any of a, b, or c above.

Tied closely to this is the issue of the risk that is attached to scope, (refer section 4.8), and the interrelationship between complexity, changes in physical and service provision scope and their corresponding effects on the change price.

The Highways Agency, although having seen virtually no price creep at the P.B. stage of their deals does acknowledge that when it has occurred it has been the result of a change in the specification i.e. a client scope change which they consider to be legitimate.

In the Stoke on Trent Grouped Schools project, affordability was maintained by scope reductions in the internal decoration that offset the price creep in other elements of the project. The scope reductions were prioritised based on the client's discussions with stakeholders.[28]
In the healthcare sector the main contributor to scope change and the associated price creep is the effect of detailed clarification of design details at P.B..[29]
In response to this situation there has been a recent effort made by the public sector to promote an increase in the level of design detail provided by the private sector at the ITN stage. However, the overall complexity inherent in the healthcare sector combined with a resistance by the private sector to take on excessive detailed design development work while still in competition has made this difficult to achieve.

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27 Variations in the physical design or agreed service provision.

28 It was considered essential to maintain community use of the school after hours free of charge for 200 days per year, and the external decorations package (including window cleaning) was kept in on a five yearly cycle because the client, with political motive, wanted the schools, and therefore the decision to use PFI, to look good from civic viewpoint.

29 Prior to P.B. stage, there are elements of the consortia's price that will just be a straight percentage e.g. fixtures and fittings. However once you get into detailed 1:50 room layouts and room data sheets there is an actual count made of those fixtures and fittings, and a firm price is based on that.

The education public sector clients with generally less complex projects, in contrast, have been more successful in leveraging more fully resolved solutions from bidders prior to P.B.. However while this minimises the price creep associated with larger changes in scope at P.B., there have still been problems with detail clarifications.[30]
One way this problem is currently being tackled in some education projects is through rewriting the OBS in a more prescriptive manner, thereby reducing the opportunity for divergent interpretations and clarifications at P.B.. The consequence of this strategy is a reduction in the potential for VFM though bidder innovation that is part of the premise of the OBS in PFI projects. The increasing tendency for technical prescription parallels the commercial prescriptiveness evident in the public sectors desired approach to key contractual requirements (refer section 4.3)

A related issue is the ability to track changes at P.B. in a way that reduces potential for excessive price creep resulting from legitimate scope change. At the ITN stage, public sector clients can use comparison to the PSC in a competitive environment to achieve a level of price satisfaction. This is not achievable at P.B., therefore there must instead be reliance on an open book approach allowing a transparency as to what the P.B. is doing and why, combined with the ability to benchmark prices in a systematic way. In the healthcare sector this is achieved using the DoH's Design Development Protocol (DDP), which has been centrally produced for local project use. In the education sector this price tracking is done in a less centralised manner relying more on the use of project advisors.[31]

4.6.2 Affordability

The issue of affordability at the P.B. stage occupies different degrees of importance with the different sectors as outlined in table 4.10.

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30 At the Crawley Schools PFI, where the client had specified the requirement for an AV socket in each room, but the P.B. had not priced for wiring them, instead assuming the wiring was part of the separate IT contract.

31 In the Stoke on Trent Grouped Schools project they run an internal model every three months to track the effect variations have on price and affordability.

Public / Private Sector Organisation	Description / Comment
Highways Agency	• The cost of PFI projects are a tiny proportion of their total annual spend (£2.5bn), are planned years in advance and therefore there is not, nor should there be, an affordability problem.
Education	• Projects in the education sector typically are far smaller in scale and the public sector client has reduced internal capacity to absorb price increases and increased barriers to secure extra funding. E.g. In the Stoke on Trent Grouped Schools project price drift between PB and FC placed the public sector client on the 'cusp of affordability'. Because of the bundled nature of the project, the affordability problem could not be solved by 'borrowing' funds from other schools in the authority, as is common in other education schemes, as all 125 schools were involved in the PFI deal. Instead, the only way forward for the client was to negotiate differences in the scope of the project. • Education clients regularly use affordability as a 'stick to beat them with' i.e. using it to negotiate favourable scope, risk and other financial changes with the P.B. E.g. In the Crawley Schools Project this negotiation tactic was used by the public sector client where they told the PB they would have to go the Council board to request extra funding (although this request was never formally made.
Healthcare	• The trusts are required to have an affordability envelope at the beginning of the procurement process as part of the OBC and public sector comparator that the bidder has to remain within. However, one of the characteristics of the healthcare sector is the regular introduction of statutory health policy requirements during the P.B. stage that change the scope, introduce price creep and therefore affect the Trust client's affordability e.g. the introduction of payment by results meant the affordability calculations had to be recast.
MOD	• The MOD approaches affordability from a standpoint of trying to explore changes in the balance sheet and financial before looking at changing the project's physical scope. The results of this focus are only 1 in 5 affordability issues result in physical scope changes. (This is further evidence of the MOD's primary procurement driver being the quality of product and service - if a physical change in scope jeopardises this then other alternatives will be found - which has historically included the abandonment of the project at PB stage.)
Private Sector (general)	• The private sector consortia are unified in their belief that affordability issues should be dealt with if possible prior to reaching P.B., and are sceptical about the use of public sector comparators in the affordability issue. They are also wary of the public sector using the affordability issue as a 'smokescreen' during P.B. negotiations. Their general belief is that to reach affordability at the P.B. stage the project would need to be de scoped. E.g. In the healthcare sector, the consortia would look to de-scope the services FM, effectively suppressing the services component of the unitary payment in order to compensate for an increase in the capital cost.

Table 4.10 Project Affordability Issues by Sector

4.7 Size and Complexity

4.7.1 Size of Project

While interviewees did believe that larger projects[32] (refer table 4.11) had more VFM potential related to their market appeal and economies of scale savings on sunk costs (see section 4.9), they were all of the opinion that project size or capital value was not a contributing factor to price creep at the P.B. stage of PFI projects. This is supported by the results of the correlation analysis presented in table 4.12 showing no statistically significant correlations in any sector.

Univariate Means: Capital Value @ Financial Close (£m)

	Average	Median	Trimmed Mean (0.2)
Healthcare	77.94	61.00	66.27
Education	33.74	21.90	30.51
Custodial	50.83	47.10	50.83
Roads	90.88	69.00	81.80
Multisector	58.99	39.20	47.78

Table 4.11 Univariate Means: Capital Value @ Financial Close by sector

Project Capital Value @ F.C. vs. % Price Change P.B. to F.C.

	Pearson Correlation	Pearson Probability	Spearman Rank Correlation
Healthcare	0.24	0.21	0.18
Education	-0.23	N/A	-0.27
Custodial	0.00	0.99	-0.09
Roads	N/A	N/A	N/A
Multisector	0.09	0.44	0.01

Table 4.12 Project Capital Value vs. % Price Change P.B. to F.C. Correlation Matrix

4.7.2 Complexity

Complexity was identified as a key driver of price creep. As with scope change, complexity can operate at the statutory, organisational and project specific level, often in combination on a particular project. This combination of complexity factors provides opportunity for divergence from the standard contractual expectation at the P.B. stage contributing to variance in price creep in individual projects and between sectors.

4.7.3 Statutory Complexity

The statutory environment can be a cause of both increased scope (see section 4.6) and programme delay. The planning process introduces complexity through its involvement of outside stakeholders into the P.B. negotiations. An example of this was in the roads sector on the A1 Darrington to Dishforth project, where certain railway possession agreements

32 In this situation capital value is used as a proxy for project size, although care some caution is required as this method discounts the effect of servicing in project size.

with Network Rail were delayed. The Highways Agency having become accustomed to the statutory dealings with Network Rail's predecessor Railtrack, misjudged the new authority. Because the Highways Agency client retained the statutory risk, they were responsible for the price creep that resulted from this situation. The highways sector now endeavours to eliminate this type of complexity by undertaking statutory works and negotiations prior to the selection of P.B., using certain legislative advantages to gain leverage over other statutory authorities, a benefit not available to the private sector PFI Co.

4.7.4 Organisational Complexity

Organisational complexity arises as a result of the particular internal set of relationships within the public sector client. The Highways Agency and HM Prison Service are both single, centralised clients and have relatively little organisational complexity. In contrast, the healthcare and education sectors are decentralised, with layers of stakeholders, from the policy makers in the PFU to the LEA project managers, and individual clinical department heads or head teachers in schools. While healthcare projects, whether procured through PFI or other forms, have always faced this organisational complexity, the propensity of the education sector to bundle projects increases their degree of complexity and the likelihood of different stakeholders promoting scope change.[33]

4.7.5 Project Specific Complexity

Complexity at the project specific level varies widely between the sectors and may incorporate the statutory and organisational issues described above. Its influence on price creep at P.B. relates to the effect project specific items have on divergence from the standard agreement terms, and the negotiations that occur around this. The more complex an issue is, the less likely it is to be worked out at ITN, and instead becomes the source of P.B. detail design development and associated deal delay and price creep. The roads and prisons sectors have a product and service that is discrete and uniform in character making it easy to apply standard contractual terms. Education projects also tend to be technically simple, and occupy small or greenfield sites leaving less room to negotiate around non-standard issues. Healthcare projects have the potential for the most project specific complexity. They are generally technically complex buildings, with a large component of mechanical and electrical systems and a large component of specialised medical equipment. They also have a mix of clinical functions and departments each with their own project specific requirements, requiring a unique design solution and specification. However, the single most important feature of project specific complexity identified by the interviewees, and one that is more prevalent in the healthcare sector, is retained estate and refurbishment.[34]
The issue of project specific complexity often leads to the decision to review the scope of the project, removing elements that are the source of complexity and potential price creep, often from the ITN stage, and in extreme cases not using PFI to procure at all. The most notable example of this is the guidance by Treasury against using PFI to procure IT projects, and the now universal exclusion of the IT component from healthcare projects. The MOD have also recently rationalised the types of projects they consider suitable for PFI, having analysed the early and wide-ranging projects now in operation. As a result projects are selected only where there is a discrete scope, and the right balance of service and capital asset provision.

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33 The question is whether the VFM gained through greater market interest and competition, and the economies of scale of bundled projects compensates for the value loss through organisation complexity related price creep?

34 The private sectors uncertainty regarding the full scope and associated risk of retained estate until PB, especially the M&E element, and the strategy that they employ as a result (see. Section 4.10) plays a large part in price creep at PB in healthcare projects. Retained estate has also been responsible for the cancellation of projects e.g. Plymouth Hospital PFI had a retained estate component in excess of 50% of the project scope, and due to the complex issues surrounding this two bidders pulled out leading to the projects collapse.

4.8 Risk

The view of both the public and private sector interviewees was that all the standard key PFI risks[35], which were the cause of price creep in the early projects, were now not subject to reallocation or negotiation. Instead, the reallocation of risk relates to project specific issues not covered by the standard project agreement and would now normally be worked through before the P.B. stage.
More common is the reassessment of risk. This is a continual process that occurs throughout the procurement period to F.C., and it is not uncommon for certain risk issues to emerge during P.B. negotiations as a result of the introduction more detailed project information. These are always project specific issues, usually a product of the complexity inherent in the project (see section 4.7.2), of which the most common example is retained estate in Healthcare projects.[36] From the private sectors viewpoint, understanding the retained estate is part of understanding the physical scope of the project (see section 4.6).
Upon reaching P.B. when a full survey is carried out and the project scope more fully understood, the price associated with a reassessment of retained estate risk usually increases.
Another example of the reassessment of risk around scope is provided by the Stoke on Trent Grouped Schools project, where the scope of the vandalism risk was the subject of clarification at P.B.. [37]

4.9 Sunk Costs

4.9.1 Sunk costs were identified as procurement costs from the public sector perspective, and bidding costs from the private sector perspective.

4.9.2 Procurement Costs

All public sector clients emphasised that procurement costs vary from project to project. The presence of significant fixed costs, primarily advisor's fees, as a large proportion of the overall procurement spend results in economies of scale. The bigger the project, the smaller the procurement costs will be as an overall percentage of capital value, with all sectors identifying that the larger the project the more attractive it becomes. This is evident in Treasury advice not to undertake PFI deals under £20m as they don't engender VFM. The Highways Agency spends in the order of £10m on procurement costs independent of the size of the project, while in healthcare the spend ranges between 2%-5%. This variance is more pronounced in MOD projects at between 5-15%. While education follows this trend, the Stoke on Trent Grouped Schools project had costs in the order of 1%, which is at the lower end of the scale. They were able to achieve this firstly from the economies of scale that resulted from the large batched nature of the project, but secondly through the maximised use of in-house procurement skills supplemented by the rigidly controlled use of advisors e.g. the advisors were asked to give separate fixed prices for each stage.

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35 For example planning delay, design, build etc as set out in the standard tender documentation

36 Typically in the healthcare sector, the inability of the bidders to undertake a full intrusive survey at ITN stage (the site is usually a functioning hospital) and the resistance of the trust to outlay capital for this either, results in heavy caveats attached to the bids, and the bidder 'taking a view' in regard to how competitively they price the risk for this element.

37 While the public sector client wanted to pass on the vandalism risk in total, the private sector PB had only priced for vandalism out of school hours i.e. not the internal vandalism risk of pupils while attending school. During the negotiations it was agreed to share the risk, as the client could not afford the price creep transferring the risk in its entirety would result in. Therefore, the public sector became responsible for vandalism during school hours, while the private sector took the after hours risk.
"When you are in negotiation you can't have everything, so you have to weigh up the prices and the risks, and in some cases we share the risks and in other cases we said 'look you provide that, but we realise there is a cost to its, therefore something else has to come out'."

4.9.3 Bidding Costs

The private sector bidding costs were similar to the public sector at an average of 5%, although it can be as high as 10% if the P.B. duration is extended. This is a function of the disproportionate split of bid costs between the pre and post P.B. selection, which are in the region of 1%: 4%. Prior to P.B. selection the private sector is in competition and therefore working at risk, so aims to minimise their sunk costs through incentive mechanisms such as deferred fees. Upon becoming P.B. these deferred incentives become payable as well as the large increase the resource required to close the deal. This increase in sunk costs become far more palatable at this stage due to the reduction in risk.

The public sector interviewees did not consider that their sunk costs made them vulnerable to price change between P.B. and F.C.. While the private sector was sensitive to their general vulnerability having made the investment, this was related more to reaching F.C., and the damage to their reputation should they not (see section 4.10.5), than specifically to price change. The vulnerability to price change came from the desire to close the deal rather than the sunk costs of the deal.

> *"It goes back to the relationship, where both parties are absolutely incentivezed because you can't contemplate the ramifications of not reaching F.C.. "*
>
> Colin McPherson, Carillion

Often the private sector consortia will use the fact that they have made such a large investment as a bargaining tool (a sign of their commitment to the project) during the negotiation process.
When there is pressure on the private sector consortia to hold their price, this often results in the FM component being reduced to compensate for increases in construction cost.

> *"The FM partner generally right from the start of the P.B. stage is under quite a bit of pressure to look at their price and see if they can squeeze their price. The FM price actually usually goes down from P.B. to F.C., where as a general rule the construction price generally creeps up a little bit. We have had quite a bit of pressure in the past to swallow costs / price reductions just to get the deal done".*
>
> *Mel Holloway, InterserveFM*

4.10 Opportunism

4.10.1 Opportunism maximises the potential of price creep within the project factors of time, scope, complexity and risk. The interviews identified mixed public and private sector opinions in regard to the presence of opportunism in the PFI market, as well as questioning the effectiveness of opportunism inhibitors such as the reserve bidder and reputation effects.

4.10.2 Private Sector Opportunism

The public sector believed that there had been no overt opportunistic behaviour[38] in the projects they had been involved with. The education sector interviewees believed that

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38 Behaviour that threatened the continuation of the project.

while negotiations were hard, the relationship was professional and opportunism was not present. In discussions with the public sector groups that had a more strategic view over multiple projects, there was recognition that opportunism levels varied between projects.[39] The private sector firms recognised opportunistic practices by their market competitors, believing that some PFI consortia use 'bid tatics' or 'take a view'. This occurs primarily at the ITN stage, where a discounted bid is submitted with a view to using the design development negotiations at P.B. to increase the price.

> *"The background is that there is this market pressure that you have to lowball to one degree or another your FITN price, so that when you step into the P.B. stage the private sector is incentivesed to look to opportunity to push the price up".*
>
> Colin McPherson, Carillion

4.10.3 Public Sector Opportunism

The private sector believes the public sector's actions are opportunistic, though not necessarily deliberate. One private sector interviewee believed that having come from a culture of always having limited finances, the public sector client is always looking to suppress the price and 'get something out of you for nothing'. In this situation the private sector takes a pragmatic view, often letting the public sector take the price reduction in one issue, with the comfort that they will regain this margin elsewhere.

4.10.4 Reserve Bidder

Interviewees from the private sector were unanimous in dismissing the reserve bidder as an inhibitor to price creep.[40] The further into the P.B. stage the negotiation progresses, the less realistic the implementation of the reserve bidder option becomes. This is not only because of the sunk costs involved with the incumbent P.B., but the practicalities of regrouping the reserve bidder bid team, which has usually been disbanded and reallocated to new projects. Further enforcing this situation, the first couple of months is the time least likely for the reserve bidder option to be used, since the public sector client and P.B. are usually still in the 'honeymoon' period.
The Stoke on Trent Grouped Schools project was the only public sector interviewee to actively maintain a relationship with the reserve bidder, meeting with them monthly to update them with project developments. In this instance the presence of the reserve bidder was real, although they ran a considerably reduced team, and their presence maintained by the prospect of other upcoming projects in the public authority. The Highways Agency believed the reserve bidder only becomes effective when the bidders prices were very close, and instead found the PSC to be a more realistic threat during P.B. negotiations. This is similar to the strategy the MOD use, which involves having 'somewhere to go, not someone'. Rather than naming a reserve bidder, they rely on the threat of alternative procurement routes. One of these is the 'do nothing' option - i.e. not awarding the contract at all. If the P.B. considers this a realistic possibility, then this becomes the most effective threat available at P.B. stage, largely related to its effect on the consortia's reputation.

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39 The Highways Agency view was that some consortia *"will try everything under the sun... There is always enormous pressure once you are down to one bidder. His shopping list grows ever longer in terms of how much money he wants. But we know that's what he'll do, so we're prepared for it, and we spend a lot of time trying to keep a lid on the project."*
The DoH PFU concurred with this *"There are examples of where the private sector has 'tried it on' - such as coming back during PB and saying that having reviewed the designs the price has increased by 20m pounds - to see what they can get away with, and when we actually look at it in detail we may end up splitting the difference, but their quoted figure was certainly trying it on. But it is hardball and it is to be expected to some extent, but there are some pure opportunists out there."*

40 No organisation interviewed could recall the introduction of a reserve bidder in a situation that did not involve the replacement of a PB who had withdrawn of their own will. While two consortia had experienced situations where the public sector had mentioned the reserve bidder option, they did not perceive this as a serious threat.

4.10.5 Reputation Effects

While reputation is not effective in combating price creep directly,[41] all private sector interviewees stated that failure to close a deal would have a significant negative effect on their reputation in the market, and are therefore highly incentiveised to pursue negotiations to F.C.. They believe that damage to private sector reputation occurs in the event of deal collapse at P.B. whether they were at fault or not.[42]
The public sector is aware that reputation effects drive the private sector towards deal close, and while they share the desire to reach F.C. they are less incentiveised by the effect deal failure would have on their reputation. Of all the public sector clients, the MOD is most well known for willingness to cancel projects prior to F.C.. They are more concerned about their reputation politically if they sign a bad deal, than they are of not signing one at all. They are comfortable with this strategy due to the belief that the consortia go into PFI deals with knowledge of the MOD's historical tendencies, and they are inclined to compensate a percentage of the bid costs, though not usually the entire amount, in the event of cancelling a project.[43]

4.11 Relational Contracting

4.11.1 All interviewees saw the relationship between the public and private sector parties as an important element in the P.B. negotiation phase, although they were reluctant to identify the relationship as having any direct effect on price creep.

The general consensus was that the P.B. stage was one of hard commercial negotiation, between the public and private sector parties and their advisors and the financier, which inevitably tested the relationship to breaking point.
Where the interviewees differed however, was in their respective approaches to the type of relationship maintained during the P.B. stage, and how that relationship related to both the preceding and subsequent project stages. These views are outlined in tables 4.13 and 4.14.

41 Due to the inability of the market to determine the magnitude of price increase and whether it was the result of unethical behaviour or genuine mistakes.

42 A couple of the early healthcare projects were the subject of PB withdrawal, and the consortia involved have not featured in healthcare projects since. In this situation the withdrawal resulted from the decision to exit the sector, and therefore reputation effects would not have been as important.

43 The Highways Agency also compensated consortia when 3 projects were withdrawn from the market in 1997 as a result of the new Labour governmental review of road schemes. This was done to ensure market confidence, although the same consideration is not evident in Scotland, where no compensation was paid when a large road PFI was cancelled in 1997 to help fund the construction of the Parliament Building. However, this has not stopped the private sector from tendering for future Scottish PFI roads contracts.

Public Sector Authority	Description / Comment
Highways Agency	• Little attention was paid to partnership on the earlier projects, although there has been a more recent effort to establish partnership down to a personal level, with the introduction of joint team building exercises on away days. • There is a distinct separation of relational roles, with both the public and private sector parties in the roads sector relying on specialist negotiators at the PB stage, and operational staff rarely being involved until much later in the process. *"The attitude on a lot of these contracts is not really a partnering attitude - they can be adversarial during contract negotiations - but they are delivering what we (the Highways Agency) want. It's just that in some of them the atmosphere is just more cordial. I don't think this difference in relationship has any relevance on price, or changes in price."*
DoH PFU	• The PB phase is primarily a 'hard bargaining situation', brought about in the healthcare sector by the private sector's tendency to try and minimise costs until appointment of PB resulting in extensive and detailed negotiation thereafter. The aim of their recent initiatives has been to try and frontload the effort, focus and negotiation to pre PB stages, enabling an improved relational atmosphere at PB.
Stoke on Trent Grouped Schools	• They regarded the extended contracting period and the level of involvement of the private sector partner in educational service delivery as necessitating a strong partnership and the ability to be able to trust the partner. *"...while you can have disagreements and heated debates about clauses, that doesn't matter if you feel you can trust the people and you feel that they are not spinning you a line. They accept that they have their position and we have our position and we have to meet somewhere in the middle, that's what negotiations are about. We had strong talking, but it was on a professional, trust and open book basis - from both our sides...* *one of the things very much in our mind was 'can we work with this outfit?, can we trust them?, can we work in partnership with them? ...The advantage of PFI negotiations is that you get to know people quite well, unlike a straight tender where they come in and you assess them without actually getting to meet them and understand them and they don't get to understand you. You get a reasonable amount of time to get comfortable with each other, and they are assessing us as much as we are assessing them."* • The continuity of the private sector team was important in building and maintaining this relationship, with the Stoke on Trent Grouped Schools project team insisting that some of the people negotiating the deal at the PB stage would also be involved in the delivery of the project.
West Sussex CC - Crawley Schools	• When the negotiation stalled, a process was in place that enabled respective directors to meet at a higher level to find a solution and drive the negotiations forward.

Table 4.13 Relational Contracting - Public Sector Views

Private Sector Firm	**Description / Comment**
General Comment	• All private sector interviewees believed the relationship either did not change, or only changed subtly upon entering the PB negotiation stage, although they made clear that this was not necessarily the view held by all private sector providers.
Interserve FM	• The relationship becomes important quite early on - early in the ITN stage, and is potentially a deciding factor at the end of the bidding stage when commercial factors are close. They are proactive in selecting what projects to bid for, and a part of this bid selection / identification process is based on the belief that there is potential for a strong relationship to develop. *"Partnering issues are also a big part of these deals. You are talking about entering into a 30 - 40 year relationship and if you can't get on with a party at the PB stage, what chance have you got for maintaining a relationship for 40 years"* • Any change in the relationship that occurs in PB is a result of the degree of openness present at the bidding stage. The more open the consortia is, the less potential for surprise there is at PB, the stronger the relationship becomes and the easier the contract is to negotiate. Where there is a lack of openness the relationship suffers, as well as there being an effect on the price. *"I don't think the quality of the relationship influenced the movement - I think it goes back to what I was saying - the only areas where I have seen movement in price has possibly been about where a bidder hasn't been completely open in some of their qualifications and this manifests itself at the PB stage as a price hike."*
Kajima	• The private sector identified the problem of the balance and tension that exists between partnership and commercial negotiation with the public sector authority. *"There is a balance in trying to be a partner to the future authority, while at the same time trying to win a competitive process.* *I think it is a very difficult process to remain 'friends' while at the same time trying to drive forward a proper sensible commercial bargain. At the end of the day the project documents are quite specific about a number of things. They are to some extent confrontational - because that is what a contract is. Its not confrontational but it does make you understand what side of the table you are on. It's quite difficult to do that while at the same time trying to engender a good relationship with the same people."* • The strength of the relationship is viewed as particularly important in offsetting the commercial tensions inherent in the PB negotiations, especially towards the end of negotiations where the relationship is inevitably tested. *"I think the strength of the relationship allows you to overcome price difficulties. Whether the price difficulties are an additional price or whether you are trying to maintain an existing price."*
Carillion	• Assuming the same people that bid the project took it to financial close (which is standard practice in Carillion), the working relationship established at ITN based on assisting the public sector partner in finding a solution, would not deliberately be undermined at PB. • Of key importance are the individuals who lead the two parties, and their ability to maintain a unity in their organisation and negotiate from a position of internal organisational strength. *"I have seen the public sector react very differently, and basically say if that's the person in charge and they can't deal with it, then push them to one side and someone more senior steps in to try and fix things. This actually slows things down because they actually don't know all the background. The other problem is that the person sitting at the front is heavily reliant upon their own team telling them the truth".*

Table 4.14 Relational Contracting - Private Sector Views

4.11.2 The Financier's Influence

All interviewees considered the financier's influence during the P.B. stage as significant, both in its affect on the relationship between the public and private sector parties, and contribution to price changes.
The first issue is that the financier and public sector client approach the P.B. negotiations from opposite price positions.[44]
The second issue revolves around the timing of the financier's involvement in the procurement process. All interviewees suggested that there has been an historical tendency for the financier and their legal advisors to become seriously engaged only upon reaching the P.B. stage. This is due to uncertainty prior to P.B. as to what the funding route would be (bond or bank debt) and reluctance on behalf of the private sector to invest in this aspect while still in competition. The results of this have been that once involved at P.B. and after carrying out due diligence, the financier will often seek to renegotiate aspects of the contract already agreed between the public and private sector parties. This delays financial close, introduces potential cost increases, and erodes the relationship between the parties that has been established over the bidding and negotiation phases.

> *"You get into an interesting situation with funders. You quite often get public sector partner here, private sector partner almost along side them agreeing with them, and the funders are saying 'you can't do that - this is my money and I'll take my money away if you don't do things the way I want'. It is often two against one. All the way through the bidding phase you have built a really strong relationship with the public sector client, often you are very good friends. The funders active involvement really only starts at the P.B. stage and they are quite focused on what they need to get out of the project and sometimes that cuts across things the other parties thought were agreed - so it can stretch the relationship slightly".*
>
> Mel Holloway, Interserve FM

> *"So you agree with the bidder, and then the bank comes in and doesn't agree, so you go through the same process all over again. ... it certainly lengthens proceedings, in which time the building prices go up"*
>
> Andy Forsyth, West Sussex CC

Having identified this as a problem, the education public sector now generally requires the financier's involvement at the ITN stage.[45] Other public sector bodies are confronting the problem through the use of funding competitions. [46]

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44 The financier tries to ensure that there is enough money in the project to provide financial robustness should something go wrong e.g. to provide correct cover ratios for bond financing or if they need to find a replacement contractor, and will seek to increase the price if necessary to achieve this, while the public sector client is trying to drive the price down to maintain affordability and VFM.

45 In the Stoke on Trent Grouped Schools project, the LEA took this a step further by requiring the financiers to agree to certain key terms before announcing the preferred partner (PB).
"...my advice to other LEAs is don't go to PP too quickly - make sure you have agreed certain key things first, so these are not reopened at a later stage which causes potential delay and price creep. So you need to know what the bank's key issues are and address them at this stage. This way you can keep the gap between PP and FC tight and short."

46 The DoH PFU requests that bidders hold a funding competition as standard practice, while the Highways Agency has introduced a separate competition for finance either towards the end of the PB phase, or once the contract is signed, to make it more difficult for the banks to make major changes. Integral to this strategy is the employment of a separate legal entity to represent the absent financiers position throughout the procurement phase.

The private sector view the presence of financiers as potentially reducing price creep, by using them as third party leverage to drive the negotiation forward on certain crunch points when the parties can't come to agreement. In this situation the financier takes the place of the consortia's own specialist 'deal closers'.

> *"What the trusts don't realise is that if the consortia did not have anybody like that the project would take a lot longer to close (it would possibly never close). So they are there to drive the process - if the process does not get driven the deal does not get done. There is definite value for everybody in getting the deal done quickly (within reason)"*
>
> Mark Mugglestone, Skanska

> *"What they bring is an understanding across a series of projects - a greater visibility and provide the 'market position' in a way we can't, therefore adding weight to our argument and unlock things"*
>
> Colin McPherson, Carillion

4.12 Correlation and Multiple Regression Analysis

The dataset was subjected to full correlation and multiple regression analysis both as a whole and in individual sectors to identify statistically significant correlations for the variables. This information is shown both in tabular form and as correlation matrices in appendix E, where statistical significance is identified in red. It was then used to inform the carrying out of further correlation analysis in the sections above.

4.13 A Preferred Bidder Price Drift Model

While the sub sections above have explored the factors responsible for price creep in individual terms, with cross referencing where appropriate, the actual relationship of these factors to each other and to price creep is dynamic. To fully understand the exact nature in which the contributors and inhibitors interact quickly pushes bounded rationality limits given the scope of this report. However a simplified model of preferred bidder price creep can be developed to demonstrate and unify the interrelationships identified in the literature, correlation and regression activities, and market interviews.

Therefore, it can be shown

$\Delta P_{FC\text{-}PB} = \Sigma\, \Delta \{ s, r, i \} (o / h)$

where $\Delta P_{FC\text{-}PB}$ is the price change from PB to FC =

Δs is change in scope

Δr is change in risk

Δi is inflation

(o / h) is the prevalence for opportunism divided by inhibitors to opportunism

This simple mathematical relationship can be shown in more complete graphical form in fig. 4.21 below , introducing complexity as a major contributing variable. The dependencies and interrelationships are demonstrated through the linking arrows. Again, this is rudimentary, with a more complete and detailed model outside the scope of this report.

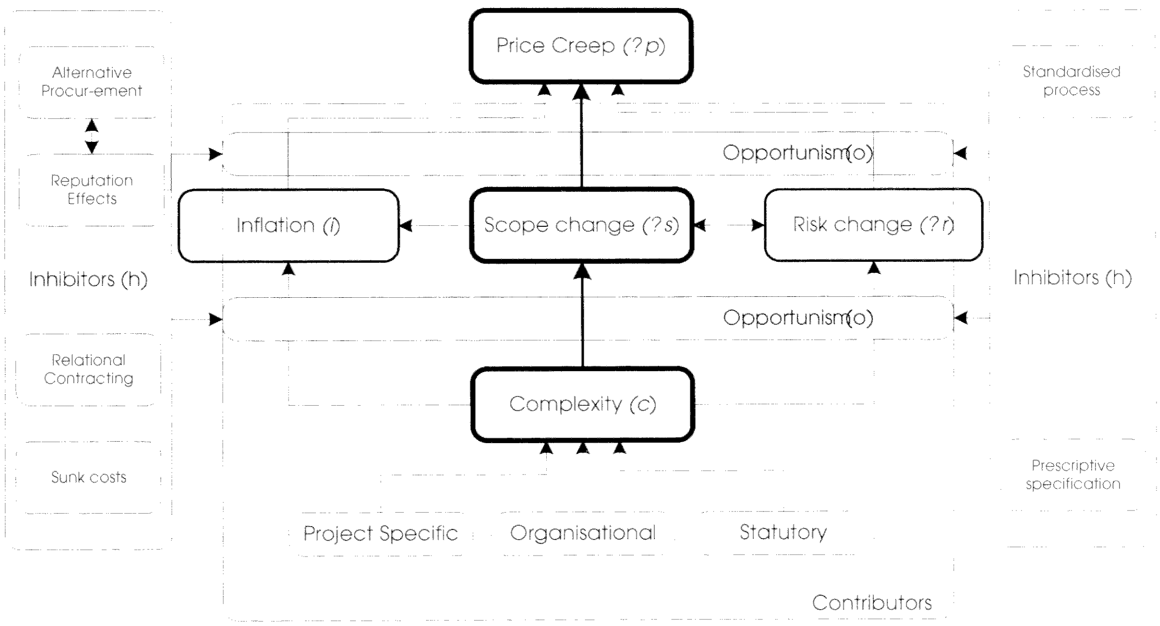

Figure 4.21 Preferred Bidder Price Creep - Contributing and Inhibiting Factor Relationships

[5] CONCLUSION AND RECOMMENDATIONS

5.1 General Conclusions

On the extent of preferred bidder price creep:

This report has established that price creep has been, and continues to be, an issue during the preferred bidder phase of PFI procured projects. While 40% of projects demonstrated price creep between 0 to 5%, there is a wide variance over the market with a small but significant number of projects distributed between -20 and 50%.
Variance is also evident between the four main PFI sectors, with the decentralised healthcare and education clients showing both consistently higher price creep, and greater variance of price creep distribution, than the centralised custodial and roads sectors. Centralised sectors may achieve lower rates of price creep as a result of a greater ability to apply learning effects and focus PFI specific knowledge and experience. The effect of learning on price creep reduction should also have become evident over time. However, contrary to both hypothesis and interviewee opinion, there was no discernable reduction in price creep over time in the majority of sectors, with this dynamic only present in the education sector.
The PFI Cos., also failed to conform to a learning effect based expectation, with no price creep difference evident between integrated and non-integrated types, or significant correlation between the frequency (and by proxy experience) and mean price creep of the individual organisations.

On the reasons for preferred bidder price creep:

The direct contributors to price creep comprise a trinity of scope change, risk change and inflation. The most significant and prevalent of these is scope change, with both inflation and risk often occurring in response to changes in project scope.
However, while this trinity of factors may be the agent of price creep, the primary driver is complexity. Complexity, in its statutory, organisational and project specific form directly feeds changes in scope, risk, and extends PB duration. Complexity at the organisational level contributes to consistent differences in mean sectorial price creep, with the 'less complex' sectors such as roads and prisons and to a lesser extent education showing less average price creep. They are characterised by new build projects on greenfield sites. In contrast, healthcare has a large proportion of retained estate and technically complex requirements, and as a consequence shows the highest mean price creep and variance of price creep.
As part of the TCE dimension of uncertainty, complexity pervades the procurement lifecycle, and the degree to which it remains present at the preferred bidder stage determines the opportunity for price creep. PFI is predicated on the deterioration in complexity over time being such that by the preferred bidder stage the negotiation follows a short and straight path to financial close. Standardisation of both the PFI process and project documentation has been implemented to augment this, acting as an inhibitor to price creep. Aligned with this, is a strategy by the public sector to try and frontload both design and commercial activities, endeavouring to flush out complexity issues and the associated price consequences while still benefiting from ITN competition leverage. While this trend has been resisted by the private sector as it increases their 'at risk' bidding costs, which have historically been back loaded to the preferred bidder stage at a 5:1 ratio, it is consistent with the new "competitive dialogue" procedure, which is due for implementation in January 2006 to replace the negotiated procedure as part of the new EU rules on public procurement.
Another complexity inhibiting trend is the increasingly prescriptive nature of output specifications, which has introduced clarity to the bidding process that has been welcomed by both the public and private sector, but theoretically reduced the capacity for VFM gain through innovation. Its impact is especially evident in the education sector where it is highly likely to have contributed to the clear reduction in price creep achieved over time.

However while learning effects, and their inhibiting processes, may have reduced statutory and organisational complexity, price creep related to project specific complexity remains widespread. The presence of a project specific dynamic is a probable explanation for the variance in price creep found in the data. This is most evident in the healthcare sector, where the inclusion of retained estate is a prime example of project specific complexity driving price creep. While the retained estate element is visible and therefore predictable, there are also many instances of unpredictable project specific complexity, which may not present themselves until the PB stage.
It is in this situation there is potential for opportunism, which as a transaction cost acts to exacerbate price creep. The possibility of opportunism is assisted by the gradual fundamental transformation inherent to the PB stage of the PFI procurement process. Without the security of contractual fiat, public sector client leverage is reduced during PB, as competition closes and procurement sunk costs increase. In recognising this situation, interviewees identified a number of different 'bridging' strategies. Relational contracting was seen as the primary inhibitor to opportunism, although there is a tension between the relational and commercial nature of the negotiation at PB that some organisations find difficult to reconcile. The presence of a reserve bidder was universally dismissed as a realistic inhibitor to private sector opportunism, although the option of having 'somewhere else to go rather than someone' was identified as efficacious. The threat of alternative procurement, whether it is the traditional route or the cancellation of the project, is potent due to its impact on the market reputation of the private sector. The private sector is highly incentiveised to reach financial close, and while they may pursue opportunity for an increased share of economic rents through price creep, are ultimately restrained by the serious loss of market credibility and associated future project rents that failure to close a deal could bring.

5.2 Recommendations for the Public Sector Client

This report identified price creep in the preferred bidder stage of PFI projects as a significant problem for public sector clients. It leads public sector resources into projects that by financial close may no longer offer VFM, with 'lock in' effects are created where the negative net benefit present is still more than the negative net benefit involved with aborting the project. It also creates an adverse selection problem, where opportunistic bidders are incentivesed to seek price creep at PB to regain economic rents forgone at the bidding phase as part of bid winning tactics.
Given this context, the data collected and analysed in this report is contributory but not definitive in its exploration of the larger and more important issue of the efficacy of PFI procurement generally. Therefore I recommend:

- That the premise and data from this report is combined with other available PFI price data to enable a conclusive comparative study to be undertaken establishing more appropriate price and decision making equivalencies between PFI and alternative procurement options. This should be part of evidence-based policymaking, furthering PFI's use in projects where there is evidence of suitability.

- To assist in the research above, routinised gathering of preferred bidder price data should be carried out by central procurement organisations, with Partnerships UK or HM Treasury holding ultimate responsibility for collection and dissemination. In respect to the commercial confidentiality issue often cited by the private sector, it would be reasonable to allow a time delay for release of this information, with financial close being an appropriate release date.

- The current practice of the use of three different forms of price data (capital value, unitary payment and NPV) is a source of confusion and potential error in comparative analysis. The use of capital value for PFI price data has serious flaws given its relative ignorance of the servicing element, which in PFI projects is significant, and should therefore be replaced by NPV data in all official PFI price reporting.

- The report identified a large variance in price creep, indicating that some projects may have been subject to optimism bias or inappropriate early selection procedure. A selection model is therefore suggested to enable better-informed decisions about project suitability for PFI, augmenting, amongst other factors, current reliance on market 'enthusiasm', and the wholesale dismissal of particular project types. The model could potentially take a more contingent approach, incorporating key factors such as complexity and identifying the projects propensity for price creep. It could also be extended for use at the key decision points in the PFI process, potentially being able to identify where bidders offer the potential of lowest overall outturn prices, rather than being selected on unsustainable ITN bids.

- The final recommendation relates to the continuation of research into the role complexity plays in price creep generally, and the retained estate aspect specifically.

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APPENDICIES

Appendix A Social Structures of Provision - sector tables

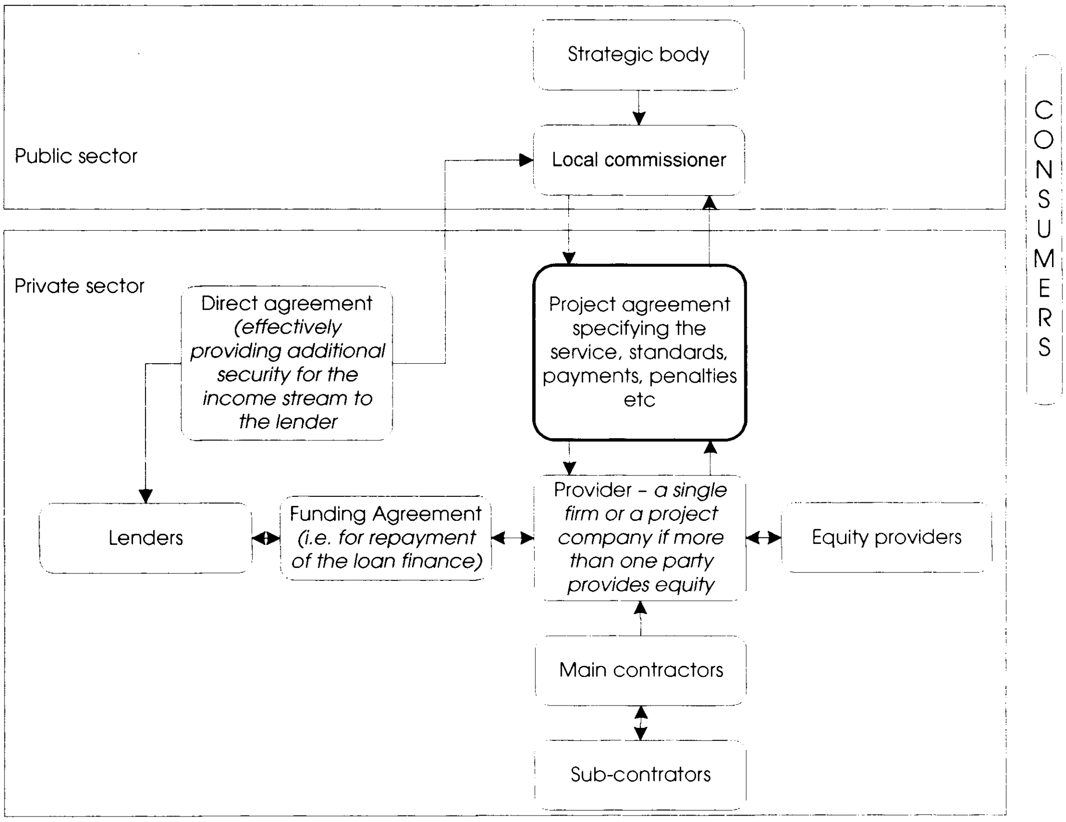
SSHCP PFI System	
Actors (A)	(A) NHS Trust - 'client' and provider of core clinical service (A) Department of Health (DH) / NHS Executive - Central Government department overseeing NHS Trust internal market (A) Trust Advisors - production of legal, technical and financial contract documentation. (A) PFU - provides strategic PPP procurement advice to Trusts on behalf of govt. (A) Special Purpose Vehicle (SPV) - Project specific DBFO company and equity holder usually consortia based. (A) Contractor / Supplier - large sized building contractor producing under a design & build system. (A) Facilities Operator - facilities operation and maintenance service provider through operational life of the PFI contract (A) Subcontractors - Myriad of construction and operation subcontractors, with generally medium to large (reputable) design and finance consultancy firms. (A) Banks engaged in lending of Senior Debt and Equity Subordinated Debt to private sector SPVs. (A) Financial investment organisations (eg Pension Funds and Insurance companies) making secondary market purchase of PFI service asset from contractor.
Spacial Structure (S)	(S) Large project sizes, on existing / brownfield and limited greenfield sites - rationalisation of any existing sites. Build split between major refurbishment and new build solutions. (S) National production from regional bases
Long-run Expectations (adaptive; conventional wisdom) (LE)	(LE) High non-cyclical demand. Unstable expectations and reliance on political will (LE) Increasing capacity of concentrated supply relative to levelling total demand (LE) Development of secondary market for contractor equity stake.
Financial Regulation (FR)	(FR) Private Sector investment regulated by the Bank of England

SSEP PFI System	
Actors (A)	(A) LEA (Local Education Authority) - Client and provider of core education service. (A) Public Sector Advisors - production of legal, technical and financial contract documentation. (A) DFES - Central government department providing funding allocation and decision. (A) ODPM - Central government department overseeing local authority activity. (A) 4Ps (Public Private Partnership Programme) - Local government associations procurement support organisation (A) Special Purpose Vehicle (SPV) - Project specific DBFO company and equity holder usually consortia based. (A) Contractor / Supplier - large sized building contractor producing under a design & build system. (A) Facilities Operator - facilities operation and maintenance service provider through operational life of the PFI contract (A) Subcontractors - Myriad of construction and operation subcontractors, with generally medium to large (reputable) design and finance consultancy firms. (A) Banks engaged in lending of Senior Debt and Equity Subordinated Debt to private sector SPVs. (A) Financial investment organisations (eg Pension Funds and Insurance companies) making secondary market purchase of PFI service asset from contractor.
Spacial Structure (S)	(S) Small to medium (batched) project sizes, on existing / brownfield and greenfield sites - rationalisation of any existing sites. Majority of new build with minor refurbishment (S) National and regional production from regional bases
Long-run Expectations (adaptive; conventional wisdom) (LE)	(LE) Medium non-cyclical demand. Moderately unstable expectations and reliance on political will (LE) Continued fragmentation of supply to levelling total demand (LE) Development of secondary market for contractor equity stake.
Financial Regulation (FR)	(FR) Private Sector investment regulated by the Bank of England

SSCP PFI System	
Actors (A)	(A) HM Prison Service - Centralised government department client with internal major projects procurement department (A) Public Sector Advisors - production of legal, technical and financial contract documentation. (A) Special Purpose Vehicle (SPV) - Project specific DBFO company and equity holder usually consortia based. (A) Contractor / Supplier - large sized building contractor producing under a design & build system. (A) Facilities Operator - facilities operation and maintenance service provider through operational life of the PFI contract (A) Subcontractors - Myriad of construction and operation subcontractors, with generally medium to large (reputable) design and finance consultancy firms. (A) Banks engaged in lending of Senior Debt and Equity Subordinated Debt to private sector SPVs. (A) Financial investment organisations (e.g. Pension Funds and Insurance companies) making secondary market purchase of PFI service asset from contractor.
Spacial Structure (S)	(S) Medium - Large project sizes, on greenfield sites - new build solutions only. (S) National production from regional bases
Long-run Expectations (adaptive; conventional wisdom) (LE)	(LE) Low non-cyclical demand. Extremely unstable expectations and reliance on political will (LE) Concentrated supply with restricted capacity relative to decreasing / levelling total demand (LE) Development of secondary market for contractor equity stake.
Financial Regulation (FR)	(FR) Private Sector investment regulated by the Bank of England

SSRP PFI System	
Actors (A)	(A) Highways Agency - centralised government agency client (A) Public Sector Advisors - production of legal, technical and financial contract documentation. (A) PFU - provides strategic PPP procurement advice to Trusts on behalf of govt. (A) Special Purpose Vehicle (SPV) - Project specific DBFO company and equity holder usually consortia based. (A) Contractor / Supplier - large sized building contractor producing under a design & build system. (A) Facilities Operator - facilities operation and maintenance service provider through operational life of the PFI contract (A) Subcontractors - Myriad of construction and operation subcontractors, with generally medium to large (reputable) design and finance consultancy firms. (A) Banks engaged in lending of Senior Debt and Equity Subordinated Debt to private sector SPVs. (A) Financial investment organisations (eg Pension Funds and Insurance companies) making secondary market purchase of PFI service asset from contractor.
Spacial Structure (S)	(S) Large project sizes, on greenfield sites. New build solutions. (S) National production from regional bases
Long-run Expectations (adaptive; conventional wisdom) (LE)	(LE) Low non-cyclical demand. Stable expectations, but based on political will (LE) Concentrated supply with restricted capacity relative to level total demand (LE) Development of secondary market for contractor equity stake.
Financial Regulation (FR)	(FR) Private Sector investment regulated by the Bank of England

Appendix B Generic structure of relationships in a PFI project



Generic structure of relationships in a PFI Project

(Source: abridged from PFI and PPP projects - Are they working? (Zitron 2003))

Appendix C MOD request for information (data exemption) letter

From Hashim Mohammad

MINISTRY OF DEFENCE
Private Finance
Level 1 Zone M
Main Building
Whitehall
SW1A 2HB

Grant Armstrong
MSc Research Student
The Bartlett School of Postgraduate Studies
University College London

Reference: PFU 1a/06/01/1

Date: 12 Aug 05

Tel: (020) 780 70626
Fax: (020) 721 89678

Dear Mr Armstrong

Request for Information - 133702-002

References:
A. EM Armstrong/Purkiss date 2 Mar 05
B. EM Armstrong/Purkiss date 10 Jun 05
C. EM Armstrong /Mohammad dated 20 Jun 05

Your correspondence at reference A and subsequently references B and C were considered a request for information in accordance with the Freedom of Information Act 2000.

The Ministry of Defence is permitted to withhold information where an exemption and/or exception are considered justifiable.

As stated at the meeting 5 Aug 05 with Mr Downing and Mr Joy at MOD Whitehall, it was assessed that the nature of the information was such that it was covered by an exemption as follows:

Exemption 43 – Commercial Interests

Nevertheless it is hoped that in discussing your prepared questions, the meeting has assisted you in your MSc studies. Accordingly could you please advise if your enquiry can now be closed.

If you are dissatisfied with our decision to refuse information or you wish to complain about any aspect of the handling of this request, then you should contact the undersigned in the first instance. Should you remain dissatisfied, then you may apply for an internal review by contacting the Director of Information Exploitation, 6th Floor, MOD Main Building, Whitehall, SW1A 2HB.

If you are still unhappy following an internal review, you may take your complaint to the Information Commissioner under the provisions of Section 50 of the Freedom of Information

Act. Please note that the Information Commissioner will not investigate your case until the MOD internal review process has been completed. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website, http://www.informationcommissioner.gov.uk

Yours sincerely

Hashim Mohammad
MOD PFU-D-EA-BusM

Appendix D Learning organisation comparative tables

Public Sector Authority	Description / Comment
West Sussex CC	• The main difficulty that Local Authorities have with PFI was identified as the lack of experience. The project leader had not had any previous PFI experience before the Crawley Schools project, but following it he moved onto a PPP with the social care services. The Crawley Schools Project) was the first PFI project the authority had done, so they had to rely heavily on consultants - technical, financial and legal. They undertook an interview process for consultants so they were in competition to get the consultant job. " *We did need them because they had been there before and they had the experience that we didn't. The documentation is extremely complicated, particularly on the legal side. The financial models that need to be drawn up, I think that even now we do not have the capacity to do them in house. They are specialised bits of kit and you need people to run them that understand what's behind the figures."* *"I think now, with so much experience under the belt and with so many authorities having done this you should be able to really tighten down on them and say look I'm going to take that, that and that as standard, you're not going to change the wording but please make sure you have got it right for us in the non standard areas. I think that the legal firms understand that."* • Other organisations that were helpful with 'free advice' were the 4Ps. "They were excellent in providing advice on running network meetings and so forth. They bring together a variety of people from different authorities together to swap stories, which is very useful".
Stoke on Trent Grouped Schools	• They acquired PFI knowledge primarily through experience (by doing it). • They stressed that there is now a lot of knowledge out there and a lot of other authorities that have gone through the PFI route so they should be used. There was none of this available for them at the time, except the five LEAs that were part of the pathfinder group used to meet in London once a month with the DFES, and we used to share experiences. Therefore they had central support, but there wasn't knowledge anywhere else, there weren't standardised terms. The standardised terms came about largely as a result of the working group. It was a learning process • They have since been involved in the dissemination of knowledge gained to other LEAs, by giving talks and receiving visits, and have also been involved with the 4Ps, who gave initial support.
Highways Agency	• The Highways Agency believes the advisors are the rock upon which a lot of the knowledge is built. *"I have a big team of advisors, there are very few people in the agency who are involved with this, so I get the work done through advisors. You may think this is an expensive way of doing things, which it is, but on the other hand many of the skills we are after are not available within government, so we buy them in the marketplace. We have had the same firms advising us centrally since we started - many of the same people in fact, which is a great advantage. There is no relearning which is useful. We work very well as a team which is valuable."* • The agency, in common with a lot of other public organisations likes to move its staff around a lot. They have people who have considerable knowledge of particular PFI projects that they have managed or been involved with. They move them off the job quite rapidly, but they may come back again. Though this is not necessarily deliberate strategy.

	• In regard to storing the information gathered, they produce a number of manuals, e.g. 'Guidance to Transaction Teams', that are stored electronically and available online. These manuals 'tell you how to do it', and the agency expects them to have a reasonable shelf life, after which they are reviewed and updated again. These are an entirely internal operation, but involves their central technical consultant who essentially has day to day editorial control and responsibility for it. They write it up and it is read and checked by the agency. *"It is really cradle to grave stuff, outlining process all the way through. It includes draft letters and reports."* • Both the project team and central procurement have access to this data. • *The project leaders have considerable experience, both in and predating PFI* *" I have been doing this for the last 17 years, obviously predating PFI. The first serious work I did on Private Finance was our 2nd Severn crossing, which is not PFI but is still private finance. I then set up with others the DBFO initiative for roads in 1994/95. I have been with it ever since."*
DoH PFU	• Learning is achieved through a mixture of civil servants and consultants either on secondment or who have joined full time as self-employed consultants. They are a mixture of legals, QS types, financials and they are all assigned the major schemes. (anything over 25m is analysed on a case-by-case basis. *"So we see them and assess them from a very early (SOC - Strategic Outline Case)) stage and we are very closely involved with them even before they go out to OJEC. So by that constant process - we go out to them with existing guidance and they come back to us with problems and through that feedback loop that is then disseminated through various means."* • They have a PFI electronic newsletter, which they have found very useful because things are so fast moving. They found that the effectiveness of the original large volume guidance was quite limited due to the fact that things are fast moving and changing, so have moved away from that 'big bang' approach to a more frequent dissemination of smaller pieces of information - very much a more modular system that is more easily updated. The general guidance on the website is aimed at the PFI market in general, while the newsletters are aimed particularly to NHS Trusts.
MOD PFU	• The MOD as an organisation have had 10 years experience in PFI, with many individuals having 4-5 years experience. • The PFU is a central MOD resource which provides the following services: a) the development of PFI policy and guidance b) PFI project Support: advice and assistance on PFI and PPP process to MOD Integrated Project Teams. c) Scrutiny of projects to provide assurance to senior MOD staff which includes undertakes a series of tests to ensure the suitability of projects for PFI, and measurement of the performance of operating projects. • The MOD PFU was established on 1st November 2004 bringing together previously disparate MOD PFUs into a centralised single MOD PFU. • The PB - FC phase has been the main priority for the last ten years - and the MOD has 53 signed deals to date. The MOD is a microcosm of the public sector PFI procurement market - having all 'sectors' represented in the MOD PFU. There are 10 different types which include accommodation, vehicle leasing, IT ... • The arrival of the new head of the PFU - Nick Prior, from Partnerships UK, has injected a new focus into the PFU. He has brought in new people from the private sector, and is rationalising the types of projects that are considered suitable for PFI. • The MOD has introduced Integrated Project Teams into its PFI procurement. These teams are continually evolving - they are created for specific projects and then dissolve. There is no such

	thing as a 'finance team', instead there is an internal project customer who brings finance (e.g.) skills into the project as necessary. In PFI this internal customer comes in the form of Customer 1: a requirements / capability manager dealing with output based project requirements at the early stages of the project up until handover and Customer 2:The user in service • Within the project lifecycle the skills required change and therefore personnel are changed accordingly - this goes against a natural desire by project people to want to stay with the project beyond the point at which it is appropriate.
Private Sector Firm	
Kajima	• They are not systematic in their organisational learning - there are two directors that lead projects through procurement who have both learnt through our own personal experience. They don't have a library of information, and disseminate knowledge in an informal rather than formal way – they all work in the same office which is a benefit of having a small group of people in close physical proximity. *"If you work in a bigger organisation, working out of separate offices then this way of working would be a real challenge, but it's not something we have had to contend with particularly."* • They use advisors who are common to both of us, and who are particular specialists in this market as you would expect, and have experience from other contractors. We have three or four legal and professional advisors, insurance advisors and other advisors that we would typically use. We can't go outside that because you need to learn, and you need to develop relationships so it's a fairly tight knit group of people we use. • They have been operating for 5 or 6 years and have 10 projects up and running at various stages of the process. They include offices, education projects and health projects. *"In our organisation we have four directors - we have a managing director, two development directors of which I am one, and an operations director.* *We have quite a lean organisation here, we don't have any other offices for our PFI team - it's all here and we tend to hire in people as and when we need them. We have a team of about 12-15 people.* *We don't do the FM servicing, we subcontract that out to whoever is the best partner at the time. We have a select list of partners, but we don't do it ourselves. In most cases we do the design and build work ourselves, but more recently we have looked to subcontract to other design and build companies to try and spread our resources."*
Carillion	• Carillion have each of the key elements of the project internally. They have an in-house finance business, construction business, and FM business. *"So in terms of pooling our knowledge and expertise we are not compromising our position on future projects, because we will continually work with each other providing an integrated PFI solution."* They see a danger in terms of sharing and dispersing information amongst the consortium. They therefore have the luxury to be able to be quite open with the knowledge we have gained within the organisation. • Knowledge management is a big issue - trying to retain it. They have documented a number of things: the approach to the bidding phase, the approach to commercial position - what they will accept and will not accept and where their negotiating tramline exists. • They believe the biggest driver is the people, " *because no matter how well written the set of words are, they can't replace the person that had in mind the concept when they*

	wrote those words - and you can't convey those on a piece of paper which is fortunate or unfortunate depending upon how you want to look at it. We have been fortunate in that we have retained a large number of people with significant amount of PFI experience in a medium/ senior management level. e.g At the project level, the team we have got at Oxford Radcliffe generally came off previous experience at Swindon. We have got people, such as myself, who have been through the bidding phase, the PB phase, the construction phase, and the service delivery phase. So we have got a good pool of people and we do concentrate on getting the right people into the business in terms of their experience of PFI. This does not mean that they need to be all knowing and seeing, but if they have a certain amount of experience in a certain area it gives you a head start. We also have people coming in cold, and the business needs that, but I think we have a good blend of people. We have a knowledge management system where by we retain the lessons learnt from previous projects." • *"So you have data, and you have process (we have processes as to how you should bid, and how to get through the PB stage), and you have the people. Personally I am always give me the people, because they will find the way through the other stuff."*
Skanska	• Firm A* had a method for knowledge transfer, whereby they had a system called 'i-connect', where if you had a question at all you just rang up, and a central administrator would connect you to someone else in the organisation that could answer your query – who had done it before. *"That is all very well, but there is a culture in the industry of not wanting to show that you did not know what you are doing, therefore not many people used the system."* • There was also a programme called 'communities of practice', where lessons learned from past projects were fed into new projects. People involved in healthcare would meet up and discuss the issues in a group forum. e.g. technical problems with one aspect of a previous project would not be repeated in subsequent projects – such as the showers trays in Project X. An informal way of formally capturing and disseminating knowledge. *"It worked, but the problem was that the length of the projects' procurement (3-5 years in healthcare) before the issues became evident. By that time you had bid other projects. This is mainly related to construction issues. Construction issues do feed into the bidding phase and have a link with contract negotiation skills – PFI is no different to other types of procurement in this."*
Interserve FM	• As an organisation they have been involved with PFI since its inception. The FM part of Interserve was originally called Building and Property until Tilbury Douglas acquired them. They had three of the earliest projects on the go at the same time: the Cumberland Infirmary, UCLH, and Newcastle Estate for the Inland Revenue. So in the organisation we had a great deal of expertise. • Most of the knowledge about the negotiation of these deals is held within the Business Development Team. They have operational contracts that have been operational for some time, and they access that expertise on a regular basis when bidding for new projects. Their operational team come in and inform the process - they do presentations. • The way they access expertise from others is that they always bid PFI projects as part of a consortium, and have worked with a number of different partners. They tend to get settled with a particular partner, or set of partners.

Table D.1 PFI Experience, use of advisors, and its effect on organisational learning

Public Sector Authority	**Description / Comment**
West Sussex CC	• Have written a 'lessons learnt' report. • While they hope that the people that were part of the project team are available for the next project, the reality is that staff tend to move around. So they have not experienced the situation where the project team stayed together from one project to the next. • Have set up a major projects team, which is trying to provide a framework for all project management across the authority - not just PFI. That team is drawing up documents on project management processes to be followed. This is part of a conscious effort to keep the project management skills in house. But PFI specific skills are wasting as they haven't got another PFI at the moment.
MOD PFU	• By their own admission the MOD are not great at post project evaluation (PPE) of PFI projects, but are aware of this and are currently concentrating on improving this within the organisation. The background to this is that previously the emphasis had been on 'doing the deal', while now they are starting to pay more attention to looking at the deal in operation. • Are establishing a central project database, which has been difficult due to the MOD's historic organisational structure (federated), which has resulted in much of the early PFI project information dispersed and difficult to collect, and many of the people involved have moved onto other MOD projects - many not related to PFI.
Private Sector PFI Co.	
Carillion	• There are a small number of people that do get recycled and that do see all the OBS. • We do have an electronic knowledge database - some of the commercial stuff is quite sensitive so that is kept as separate files rather than on a database.
Firm X	• 'Communities of practice' was centralised (representatives from each of the projects would attend). *"However, the unfortunate thing was, there would be a report produced as a result of the communities of practice, but it would not get circulated because it was felt that it was too commercially sensitive to distribute widely within the company. Similarly, the business plan would not get disseminated for the same reasons - only the board would have access to it."*
Interserve FM	• The knowledge is held centrally on the business development server, that contains project knowledge going back to 1996. • The latest bids are held centrally and each bid tends to be a development of the previous one, from an FM point of view. It also informs the commercial or pricing aspect of the bid through learning through feedback, or learn through getting hold of information from competitors - *"there are a number of ways you learn about what is the best bid model to put together."*

Table D.2 Processes for collecting and storing PFI specific Knowledge

Public Sector Authority	**Description / Comment**
West Sussex CC	• Carried out internal project management days for the project management team, which was an attempt to do teambuilding and getting people, to understand what the authority were trying to achieve. This was led by internal training organisations. • There were a couple of conferences that ran in other schools, where they talked about their PFI experiences. • 4Ps ran network meetings, which I and another colleague attended. • Financial awareness training was held with KPMG • Lawyers gave internal training on the negotiation phase.
Stoke on Trent Grouped Schools	• There is a small team of four highly skilled people who manage and monitor the PFI contract in operation for the council. They go on regular, usually yearly, training to keep up to date.
Highways Agency	• Particular training focused on commercial negotiation *"one thing that is fairly unique to PFI, is that negotiation is not something that we normally do with our contracts - in fact the law does not allow it. So for these we do train our staff fairly intensively. We take them away over several days and give them the hardest time of their lives. We keep them up all night, don't give them anything to eat - try to make it as realistic as possible. This is in terms of commercial negotiation. A lot of time is spent in these projects with two teams facing each other across the table, hammering away usually over the most insignificant points, the major issues are not usually discussed to the same level of intensity. It is a skill that we would not usually have at the agency, so we do the training. The private sector contractors found out that we were doing this and wrote and complained - outrageous."*
DoH PFU	• The PFU is a mixture of civil servants who do internal training courses, but also rely on external experts with specialist knowledge on both the financial and legal side. • The PFU cascades knowledge down - through the trust forums and the capital network forums which involve all the people in the SHA's as well, which is a very formal and well established organisations like that to ensure that everyone has the latest advice.
MOD PFU	• There is a large emphasis on staff development and training within the MOD generally. This is no different in the PFU. There is a requirement for professional membership generally, and the training within the civil service is extensive. • The MOD has a career development philosophy that takes people on different 'tours' within the organisation, so you have people with a wide range of different experience and background. • The PFU runs a specific internal PFI course.
Private Sector PFI Co.	
Kajima	• Staff not sent on outside PFI specific training. There is small investment on industry specific conferences and seminars. • Provided with seminars by potential suppliers to our supply chain, or advisors. "Someone will come into us and they will tell us the latest about a particular issue, but that's not a structured training programme, it's just something we take benefit of. In some ways PFI is a relatively immature market, so there is not a lot of structured training process, so you have to absorb and take on board what information you can. We are all open to sources of information all the time. e.g. Our insurance advisors were interested in the issue of whether a SPV acts as an agent for the purposes of insurance broking under the new SFA rules - and they developed a through knowledge on that topic so I didn't need to go on any courses to understand that but I found out about it through the advisors - on the job learning."
Carillion	• No investment in specific external training. "*The market is very*

	dynamic, so keeping up to date with the trends and direction in the market is a challenge. I don't know if you would call it training or not, but we do spend quite a lot of time interacting with our advisors (lawyers, funders or other consultants) trying to find out what else is going on in the market and what the position is elsewhere. That is very practical training but it's really knowledge gain - we are trying to assimilate as much knowledge as we can." • Effort placed into developing staff in-house, rather than send them off for training, trying to develop them to do more. Carillion are trying to develop their people to do a wide range of things - so where as they used to have a construction team, an FM team and a investment team, they now have a team, with all team members required to have an understanding of the other parts of the team e.g. the commercial person needs to have an understanding of the FM part of the project etc.
Interserve FM	• PFI related training is mainly for the business development team, and it tends to be PFI seminars • Internal teaching with PFI teams about what some of the key issues are in terms of PFI projects. *"Although most of it is standardised these days, there are some pretty clear risk issues for the contractor, and its important that anybody who gets involved in negotiations understands what the risk issues are - where you can get to in terms of any negotiations with clients. So we do have sessions where we train the staff".* • Comprehensive handover summaries prepared for the operational teams- informing them of what the project is about, the key commercial issues, and what they are meant to be delivering.

Table D.3 Extent and Type of Investment in Staff Training

Public Sector Authority	**Description / Comment**
Stoke on Trent Grouped Schools	• Had three key sets of advisors • The financial advisors were a small company called APOS, who comprise about 20 people who have formed themselves into a niche market - I think they were a break away group from PWC originally and they specialise in PFI financial advice in housing, education and transport. They worked on the Channel Tunnel rail link originally, so were very experienced. • The legal people were Eversheds, who were also very experienced and had a reputation in the market. • The technical advisors were Gleeds Management Services for condition surveys and the Building Research Establishment (BRE) when were trying to look what the future held for M&E systems.
DoH PFU	• Each trust selects there own advisors. PFU have refined the PQQ's on which the trusts appoint their bidders and consortiums, so they now have to take in certain key factors.
MOD PFU	• Extensive use of external advisors *"we have a bid budget to contract specialist knowledge from the private sector, which in part stems from a default risk adverse approach. We use them in a phased or contingent way - when required by the 'customer 1'."* • Framework agreement for advisors. • Recent move towards direct accountability for external advisors and the advice they give.

Table D.4 Reliance on Public Sector Advisors

Appendix E Correlation and Multiple Regression Tables and Matrices

Multisector - Pearson Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)	CENTRALISED CLIENT(0) / DECENTRALISED CLIENT (1)	SECTOR BY CODE
REGION BY CODE	1.000	-0.217	-0.217	-0.271	0.008	***-0.278***	-0.007	-0.160	-0.131	0.025	0.065	-0.166	-0.235
DATE OF OJEC/OJEU		1.000	0.966	0.924	-0.138	***0.053***	-0.103	-0.199	-0.014	0.082	-0.087	0.359	0.271
DATE OF PREFERRED BIDDER			1.000	0.954	-0.088	***0.056***	0.157	-0.215	-0.138	0.101	-0.064	0.371	0.335
DATE OF FINANCIAL CLOSE				1.000	-0.024	***0.151***	0.141	0.088	0.109	0.070	-0.014	0.467	0.495
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					1.000	***0.087***	0.188	0.216	-0.006	-0.035	0.198	-0.054	0.161
% CHANGE PB - FC						***1.000***	***0.011***	***0.308***	***0.208***	***-0.114***	***-0.065***	***0.255***	***0.201***
OJEC-PB DURATION (days)							1.000	-0.065	-0.482	0.076	0.087	0.054	0.251
PREFERRED BIDDER DURATION (days)								1.000	0.815	-0.107	0.168	0.291	0.500
PB-FC AS % OF OJEC-FC DURATION									1.000	-0.174	0.059	0.301	0.396
CONSORTIA BY CODE										1.000	-0.170	-0.130	0.017
INTEGRATED (0) / NON-INTEGRATED (1)											1.000	-0.110	0.009
CENTRALISED CLIENT(0) / DECENTRALISED CLIENT (1)												1.000	0.660
SECTOR BY CODE													1.000

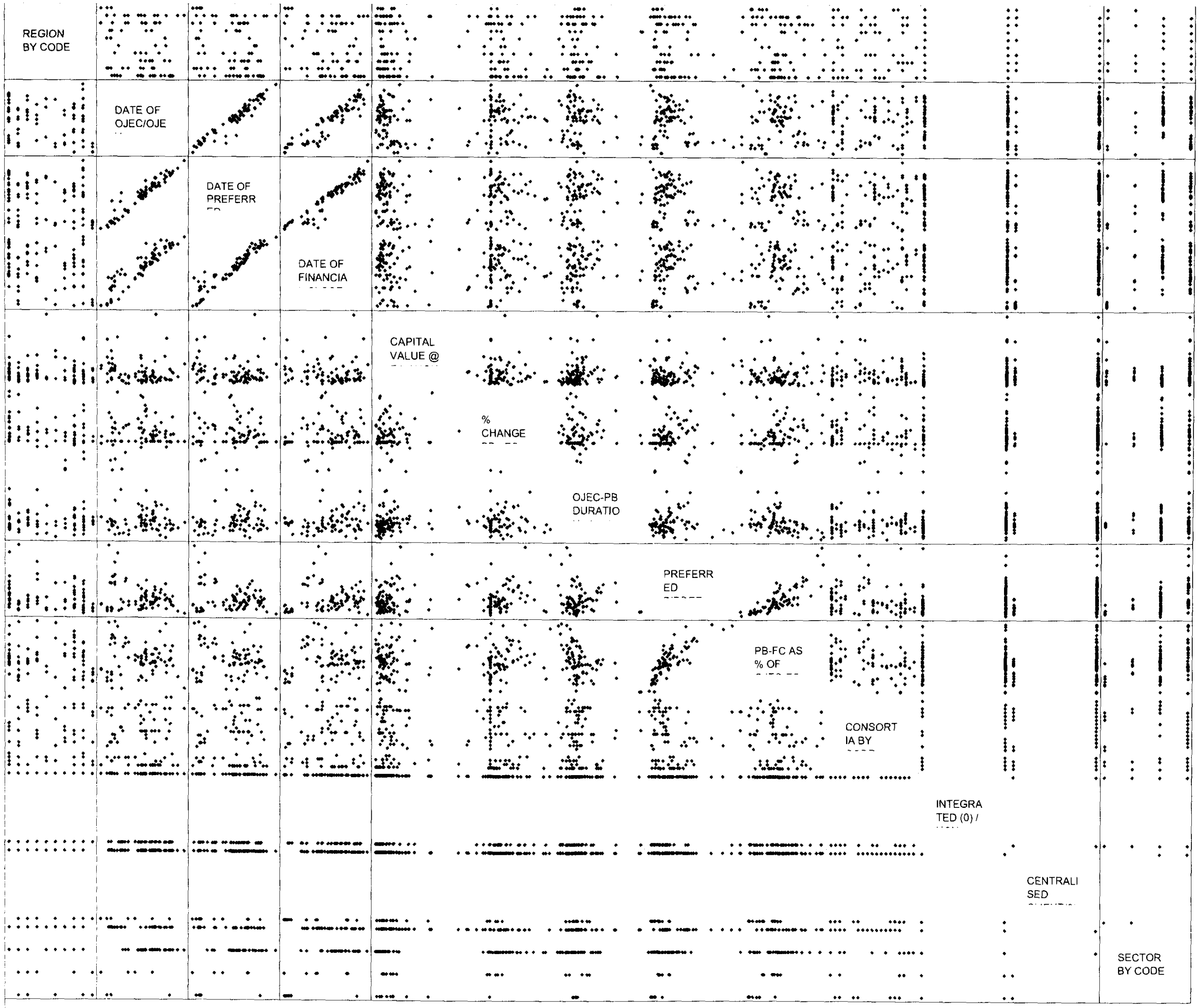
Multisector - Pearson Probabilities

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)	CENTRALISED CLIENT(0) / DECENTRALISED CLIENT (1)	SECTOR BY CODE
REGION BY CODE	-	0.050	0.050	0.014	0.941	***0.011***	0.951	0.150	0.242	0.824	0.560	0.136	0.033
DATE OF OJEC/OJEU		-	0.000	0.000	0.216	***0.634***	0.359	0.073	0.904	0.465	0.436	0.001	0.014
DATE OF PREFERRED BIDDER			-	0.000	0.430	***0.618***	0.158	0.053	0.215	0.367	0.567	0.001	0.002
DATE OF FINANCIAL CLOSE				-	0.832	***0.174***	0.208	0.434	0.330	0.531	0.900	0.000	0.000
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					-	***0.438***	0.090	0.051	0.954	0.754	0.074	0.627	0.147
% CHANGE PB - FC						-	***0.920***	***0.005***	***0.060***	***0.310***	***0.560***	***0.021***	***0.070***
OJEC-PB DURATION (days)							-	0.561	0.000	0.499	0.439	0.632	0.023
PREFERRED BIDDER DURATION (days)								-	0.000	0.340	0.132	0.008	0.000
PB-FC AS % OF OJEC-FC DURATION									-	0.118	0.597	0.006	0.000
CONSORTIA BY CODE										-	0.127	0.246	0.878
INTEGRATED (0) / NON-INTEGRATED (1)											-	0.324	0.935
CENTRALISED CLIENT(0) / DECENTRALISED CLIENT (1)												-	0.000
SECTOR BY CODE													-

Spearman Rank Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	OJEC-PB DURATION (days)	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)	CENTRALISED CLIENT(0)/ DECENTRALISED CLIENT (1)	SECTOR BY CODE
REGION BY CODE	1.000	-0.226	-0.238	-0.261	-0.035	***-0.304***	0.010	-0.185	-0.120	0.037	0.054	-0.211	-0.270
DATE OF OJEC/OJEU		1.000	0.967	0.939	-0.196	***0.088***	-0.060	0.041	0.069	0.058	-0.090	0.384	0.191
DATE OF PREFERRED BIDDER			1.000	0.971	-0.129	***0.105***	0.157	0.037	-0.049	0.077	-0.066	0.367	0.234
DATE OF FINANCIAL CLOSE				1.000	-0.073	***0.183***	0.162	0.223	0.091	0.046	-0.002	0.424	0.321
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					1.000	***0.014***	0.300	0.149	-0.078	0.105	0.197	-0.141	0.226
% CHANGE PB - FC						***1.000***	***0.016***	***0.314***	***0.242***	***-0.114***	***-0.051***	***0.334***	***0.227***
OJEC-PB DURATION (days)							1.000	0.047	-0.462	0.090	0.162	-0.030	0.207
PREFERRED BIDDER DURATION (days)								1.000	0.833	-0.180	0.198	0.349	0.557
PB-FC AS % OF OJEC-FC DURATION									1.000	-0.180	0.047	0.314	0.365
CONSORTIA BY CODE										1.000	-0.190	-0.126	0.018
INTEGRATED (0) / NON-INTEGRATED (1)											1.000	-0.104	-0.008
CENTRALISED CLIENT(0) / DECENTRALISED CLIENT (1)												1.000	0.659
SECTOR BY CODE													1.000

Multisector - Correlation Matrix



Multisectorial Multiple Regression Summary Output

Regression Statistics	
Multiple R	0.4330
R Square	0.1875
Adjusted R Square	0.0730
Standard Error	0.1187
Observations	82.0000

ANOVA

	df	SS	MS	F	Significance F
Regression	10.0000	0.2307	0.0231	1.6380	0.1135
Residual	71.0000	1.0001	0.0141		
Total	81.0000	1.2308			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.1438	0.6501	-0.2211	0.8256	-1.4400	1.1525	-1.4400	1.1525
DATE OF FINANCIAL CLOSE	0.0000	0.0000	0.4813	0.6318	0.0000	0.0000	0.0000	0.0000
CAPITAL VALUE @ FINANCIAL CLOSE (£m	0.0002	0.0003	0.6679	0.5063	-0.0004	0.0008	-0.0004	0.0008
OJEC-PB DURATION (days)	0.0000	0.0001	-0.4785	0.6338	-0.0002	0.0001	-0.0002	0.0001
PREFERRED BIDDER DURATION (days)	0.0002	0.0001	2.1888	0.0319	0.0000	0.0005	0.0000	0.0005
PB-FC AS % OF OJEC-FC DURATION	-0.2335	0.2166	-1.0781	0.2846	-0.6653	0.1984	-0.6653	0.1984
CONSORTIA BY CODE	-0.0024	0.0024	-1.0228	0.3099	-0.0071	0.0023	-0.0071	0.0023
CONSORTIA BY CODE(2nd Partner)	-0.0041	0.0059	-0.6868	0.4944	-0.0158	0.0077	-0.0158	0.0077
INTEGRATED (0) / NON-INTEGRATED (1)	-0.0379	0.0291	-1.3012	0.1974	-0.0959	0.0202	-0.0959	0.0202
SECTOR BY CODE	-0.0428	0.0350	-1.2238	0.2251	-0.1126	0.0269	-0.1126	0.0269
CENTRALISED CLIENT(0) / DECENTRALISE	0.1094	0.0717	1.5262	0.1314	-0.0335	0.2523	-0.0335	0.2523

RESIDUAL OUTPUT

Observation	Predicted % CHANGE PB - FC	Residuals	Standard Residuals
1	0.0112	-0.0112	-0.1007
2	0.0014	-0.0014	-0.0128
3	0.0166	-0.0166	-0.1494
4	0.0055	-0.0055	-0.0491
5	0.0705	-0.0705	-0.6349
6	0.0823	-0.0823	-0.7405
7	-0.0146	0.0146	0.1316
8	-0.0042	0.0042	0.0377
9	0.0782	-0.0782	-0.7039
10	-0.0191	-0.0008	-0.0068
11	0.0153	0.0319	0.2874
12	0.0166	0.0621	0.5590
13	0.0215	-0.0215	-0.1934
14	-0.0488	0.0488	0.4392
15	-0.0347	0.0347	0.3122
16	0.0396	-0.0396	-0.3567
17	0.0114	0.0518	0.4658
18	0.0186	0.0795	0.7153
19	0.0568	0.0737	0.6629
20	0.0713	0.0908	0.8170
21	0.0619	0.3611	3.2500
22	0.1405	0.0111	0.0994
23	0.0956	0.3445	3.1006
24	0.0301	0.1008	0.9072
25	0.0908	0.0356	0.3208
26	0.0531	0.0555	0.4991
27	0.1134	-0.0300	-0.2704
28	0.1077	0.2378	2.1398
29	0.0960	-0.1097	-0.9876
30	0.0774	-0.0545	-0.4902
31	0.0847	-0.0847	-0.7624
32	0.0786	-0.0786	-0.7076
33	0.0853	-0.0427	-0.3843
34	0.1176	-0.1176	-1.0584
35	0.0513	-0.0513	-0.4619
36	0.1055	0.1859	1.6734
37	0.0643	-0.0643	-0.5790
38	0.0702	-0.0108	-0.0969
39	0.1504	0.0653	0.5874
40	0.0854	0.1587	1.4282
41	0.1529	0.0280	0.2521
42	0.1076	-0.1076	-0.9683
43	0.1198	-0.1091	-0.9819
44	0.0809	-0.1329	-1.1959
45	0.0913	-0.0496	-0.4463
46	0.0695	-0.0743	-0.6683
47	0.0770	0.0230	0.2070
48	0.0922	-0.0202	-0.1819
49	0.1447	-0.0914	-0.8223
50	0.0934	-0.0934	-0.8403
51	0.1174	-0.1165	-1.0484
52	0.0856	-0.0856	-0.7708
53	0.1380	0.0867	0.7800
54	0.0826	-0.2667	-2.4004
55	0.1163	0.0119	0.1072
56	0.0719	-0.2433	-2.1896
57	0.0946	-0.1314	-1.1822
58	0.1189	0.0581	0.5225
59	0.1463	-0.1413	-1.2720
60	0.0071	0.0717	0.6453
61	0.2672	0.0055	0.0497
62	0.1200	-0.0001	-0.0007
63	0.1083	-0.2139	-1.9249
64	0.0787	-0.0787	-0.7084
65	0.2442	0.2264	2.0375
66	0.0408	-0.0408	-0.3676
67	0.0443	-0.0118	-0.1058
68	0.0242	-0.0242	-0.2174
69	0.0492	-0.1048	-0.9433
70	0.0525	0.0143	0.1290
71	0.0189	-0.0189	-0.1703
72	0.0874	-0.0566	-0.5098
73	0.0742	0.2018	1.8161
74	0.0638	0.0237	0.2135
75	0.0963	0.0465	0.4189
76	0.1314	-0.0214	-0.1923
77	0.0135	0.0527	0.4741
78	0.0828	-0.0108	-0.0971
79	0.1235	0.1877	1.6895
80	0.0852	0.1489	1.3396
81	0.0957	-0.0957	-0.8610
82	0.1010	0.0776	0.6981

Healthcare - Pearson Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC - FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.216	-0.161	-0.228	0.117	***-0.518***	-0.057	-0.043	0.125	0.148
DATE OF OJEC/OJEU		1.000	0.943	0.937	0.006	***0.103***	-0.562	-0.357	-0.020	-0.120
DATE OF PREFERRED BIDDER			1.000	0.949	-0.004	***0.081***	-0.698	-0.615	0.015	-0.123
DATE OF FINANCIAL CLOSE				1.000	0.070	***0.267***	-0.436	-0.390	-0.027	-0.079
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					1.000	***0.236***	0.169	0.087	-0.159	0.304
% CHANGE PB - FC						***1.000***	***0.375***	***0.229***	***-0.221***	***-0.113***
PREFERRED BIDDER DURATION (days)							1.000	0.867	-0.103	0.170
PB-FC AS % OF OJEC - FC DURATION								1.000	-0.159	0.146
CONSORTIA BY CODE									1.000	-0.206
INTEGRATED (0) / NON-INTEGRATED (1)										1.000

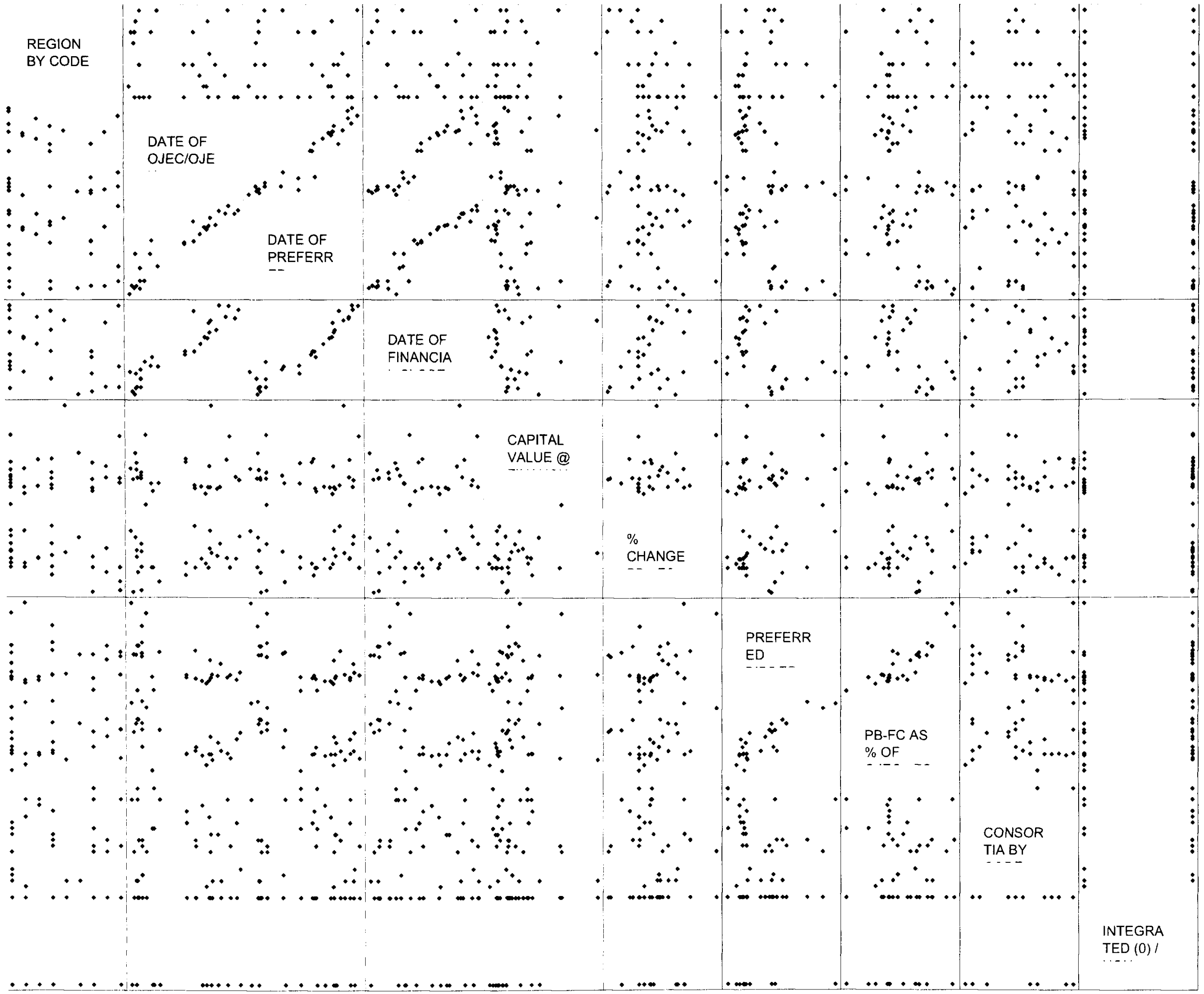
Healthcare - Pearson Probabilities

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC - FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	-	0.253	0.396	0.227	0.537	***0.003***	0.765	0.823	0.510	0.434
DATE OF OJEC/OJEU		-	0.000	0.000	0.975	***0.587***	0.001	0.053	0.918	0.527
DATE OF PREFERRED BIDDER			-	0.000	0.984	***0.672***	0.000	0.000	0.937	0.517
DATE OF FINANCIAL CLOSE				-	0.713	***0.153***	0.016	0.033	0.888	0.677
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					-	***0.210***	0.371	0.649	0.401	0.103
% CHANGE PB - FC						-	***0.041***	***0.223***	***0.240***	***0.552***
PREFERRED BIDDER DURATION (days)							-	0.000	0.587	0.368
PB-FC AS % OF OJEC - FC DURATION								-	0.401	0.442
CONSORTIA BY CODE									-	0.275
INTEGRATED (0) / NON-INTEGRATED (1)										-

Healthcare - Spearman Rank Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC - FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.184	-0.133	-0.226	0.086	***-0.504***	0.045	0.022	0.087	0.130
DATE OF OJEC/OJEU		1.000	0.943	0.932	-0.190	***0.096***	-0.483	-0.428	-0.002	-0.132
DATE OF PREFERRED BIDDER			1.000	0.954	-0.176	***0.151***	-0.542	-0.585	-0.010	-0.100
DATE OF FINANCIAL CLOSE				1.000	-0.145	***0.254***	-0.399	-0.471	0.019	-0.092
CAPITAL VALUE @ FINANCIAL CLOSE (£m)					1.000	***0.177***	0.362	0.224	-0.043	0.364
% CHANGE PB - FC						***1.000***	***0.276***	***0.194***	***-0.273***	***-0.124***
PREFERRED BIDDER DURATION (days)							1.000	0.840	-0.295	0.252
PB-FC AS % OF OJEC - FC DURATION								1.000	-0.204	0.172
CONSORTIA BY CODE									1.000	-0.245
INTEGRATED (0) / NON-INTEGRATED (1)										1.000

Healthcare - Correlation Matrix



Healthcare Multiple Regression SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.8054
R Square	0.6487
Adjusted R Square	0.5149
Standard Error	0.0998
Observations	30

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	0.3865	0.0483	4.8475	0.0017
Residual	21	0.2093	0.0100		
Total	29	0.5959			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-3.0651	1.1849	-2.5869	0.0172	-5.5293	-0.6010	-5.5293	-0.6010
REGION BY CODE	-0.0227	0.0075	-3.0481	0.0061	-0.0383	-0.0072	-0.0383	-0.0072
DATE OF FINANCIAL CLOSE	0.0001	0.0000	2.6490	0.0150	0.0000	0.0001	0.0000	0.0001
CAPITAL VALUE @ FINANCIAL CLOSE (£m	0.0005	0.0003	1.6347	0.1170	-0.0001	0.0011	-0.0001	0.0011
OJEC-PB DURATION (days)	0.0003	0.0002	1.4465	0.1628	-0.0001	0.0007	-0.0001	0.0007
PREFERRED BIDDER DURATION (days)	0.0001	0.0002	0.3314	0.7437	-0.0004	0.0005	-0.0004	0.0005
PB-FC AS % OF OJEC - FC DURATION	0.5381	0.5832	0.9226	0.3667	-0.6748	1.7509	-0.6748	1.7509
CONSORTIA BY CODE	-0.0028	0.0044	-0.6448	0.5260	-0.0119	0.0062	-0.0119	0.0062
INTEGRATED (0) / NON-INTEGRATED (1)	-0.0671	0.0415	-1.6195	0.1203	-0.1533	0.0191	-0.1533	0.0191

RESIDUAL OUTPUT

Observation	*Predicted % CHANGE PB - FC*	*Residuals*	*Standard Residuals*
1	0.0835	0.1411	1.6608
2	-0.0623	-0.1219	-1.4345
3	0.1452	-0.0169	-0.1992
4	-0.1078	-0.0637	-0.7493
5	-0.0455	0.0087	0.1024
6	0.0842	0.0927	1.0916
7	0.1228	-0.1179	-1.3873
8	-0.0586	0.1374	1.6178
9	0.2901	-0.0174	-0.2043
10	0.1744	-0.0545	-0.6412
11	-0.0100	-0.0956	-1.1251
12	0.1331	-0.1331	-1.5667
13	0.3338	0.1368	1.6101
14	0.0154	-0.0154	-0.1811
15	0.0462	-0.0136	-0.1599
16	-0.1244	0.1244	1.4641
17	0.0044	-0.0601	-0.7070
18	0.0117	0.0551	0.6488
19	-0.0159	0.0159	0.1872
20	0.0616	-0.0309	-0.3637
21	0.1200	0.1560	1.8361
22	0.0698	0.0177	0.2084
23	0.0614	0.0815	0.9591
24	0.1969	-0.0869	-1.0226
25	0.0939	-0.0277	-0.3261
26	0.1405	-0.0685	-0.8068
27	0.2356	0.0757	0.8909
28	0.2431	-0.0090	-0.1063
29	0.0535	-0.0535	-0.6300
30	0.2352	-0.0566	-0.6661

Education - Pearson Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.026	-0.034	0.202	-0.025	0.049	***-0.085***	0.031	0.035	-0.039	-0.152
DATE OF OJEC/OJEU		1.000	0.960	0.443	0.900	0.272	***-0.486***	-0.278	-0.217	0.005	0.096
DATE OF PREFERRED BIDDER			1.000	0.509	0.953	0.408	***-0.469***	-0.238	-0.352	-0.009	0.137
CAPITAL VALUE @ PB (£m)				1.000	0.373	0.777	***-0.234***	-0.482	-0.600	0.073	-0.038
DATE OF FINANCIAL CLOSE					1.000	0.336	***-0.445***	0.066	-0.125	-0.091	0.240
% CHANGE PB - FC							***1.000***	***0.119***	***0.035***	***0.012***	***-0.023***
PREFERRED BIDDER DURATION (days)								1.000	0.762	-0.262	0.321
PB-FC AS % OF OJEC-FC DURATION									1.000	-0.184	0.079
CONSORTIA BY CODE										1.000	-0.455
INTEGRATED (0) / NON-INTEGRATED (1)											1.000

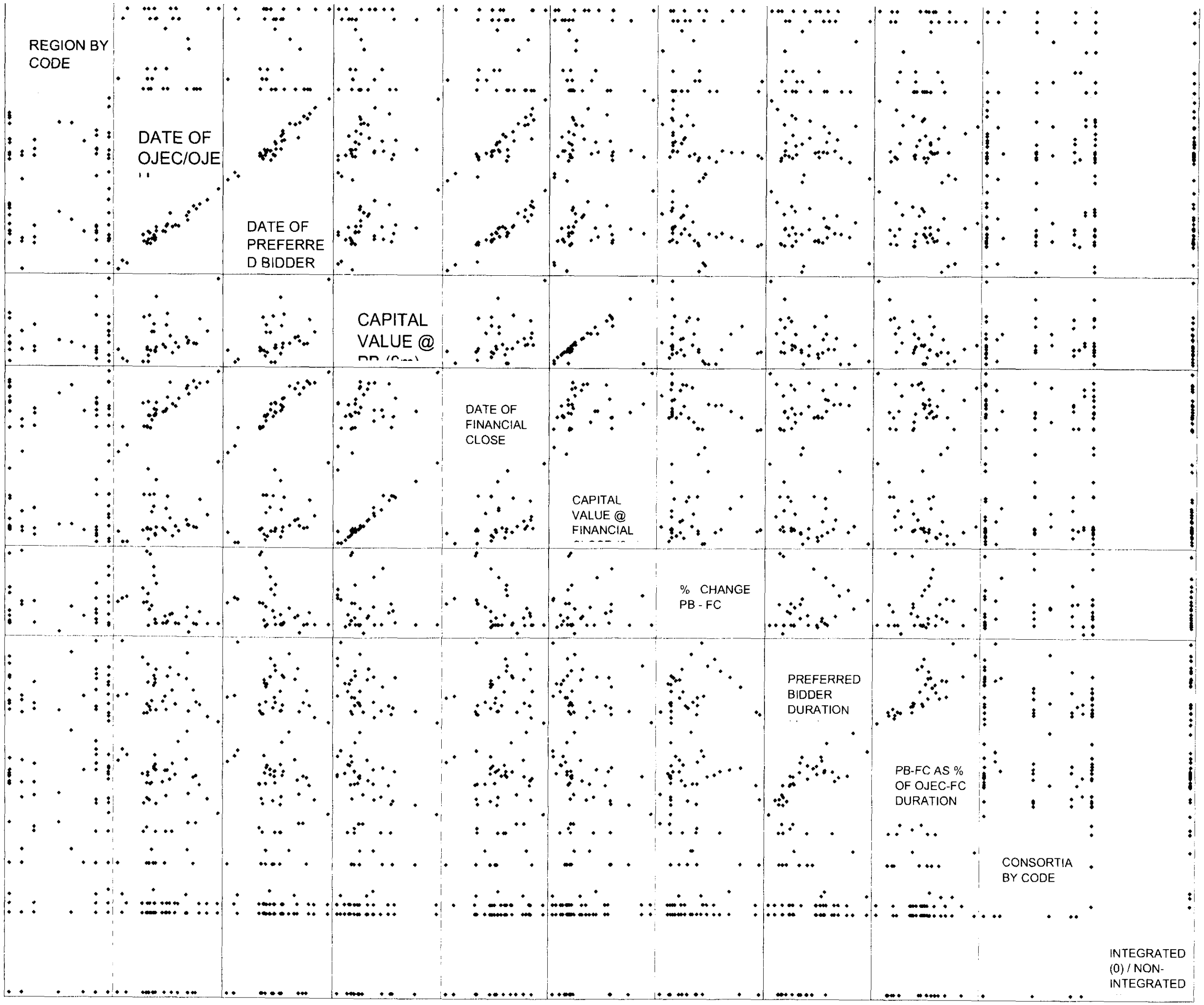
Education - Pearson Probabilities

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	-	0.879	0.844	0.238	0.885	0.779	***0.623***	0.855	0.842	0.823	0.375
DATE OF OJEC/OJEU		-	0.000	0.007	0.000	0.109	***0.003***	0.100	0.204	0.978	0.577
CAPITAL VALUE @ PB (£m)				-	0.025	0.000	***0.170***	0.003	0.000	0.673	0.826
DATE OF FINANCIAL CLOSE					-	0.045	***0.007***	0.701	0.468	0.598	0.158
CAPITAL VALUE @ FINANCIAL CLOSE (£m)						-	***#REF!***	#REF!	#REF!	#REF!	#REF!
% CHANGE PB - FC							-	***0.488***	***0.838***	***0.945***	***0.896***
PREFERRED BIDDER DURATION (days)								-	0.000	0.122	0.057
PB-FC AS % OF OJEC-FC DURATION									-	0.282	0.648
CONSORTIA BY CODE										-	0.005
INTEGRATED (0) / NON-INTEGRATED (1)											-

Education - Spearman Rank Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	CAPITAL VALUE @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.042	-0.089	0.181	-0.086	0.039	***-0.054***	-0.071	0.029	-0.058	-0.104
DATE OF OJEC/OJEU		1.000	0.937	0.481	0.862	0.304	***-0.627***	-0.181	-0.135	-0.005	0.071
DATE OF PREFERRED BIDDER			1.000	0.513	0.951	0.451	***-0.585***	-0.106	-0.238	-0.041	0.096
CAPITAL VALUE @ PB (£m)				1.000	0.373	0.814	***-0.265***	-0.439	-0.526	0.182	-0.040
DATE OF FINANCIAL CLOSE					1.000	0.396	***-0.459***	0.117	-0.093	-0.107	0.194
CAPITAL VALUE @ FINANCIAL CLOSE (£m)						1.000	***-0.001***	-0.296	-0.579	0.104	0.062
% CHANGE PB - FC							***1.000***	***0.250***	***0.161***	***0.074***	***0.016***
PREFERRED BIDDER DURATION (days)								1.000	0.787	-0.216	0.293
PB-FC AS % OF OJEC-FC DURATION									1.000	-0.138	0.049
CONSORTIA BY CODE										1.000	-0.444
INTEGRATED (0) / NON-INTEGRATED (1)											1.000

Education - Correlation Matrix



Education Multiple Regression SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.5807
R Square	0.3373
Adjusted R Square	0.1252
Standard Error	0.1184
Observations	34

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	0.1784	0.0223	1.5903	0.1780
Residual	25	0.3507	0.0140		
Total	33	0.5291			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	4.8772	1.4261	3.4200	0.0022	1.9402	7.8143	1.9402	7.8143
REGION BY CODE	-0.0053	0.0062	-0.8525	0.4020	-0.0180	0.0075	-0.0180	0.0075
DATE OF FINANCIAL CLOSE	-0.0001	0.0000	-3.2449	0.0033	-0.0002	0.0000	-0.0002	0.0000
CAPITAL VALUE @ FINANCIAL CLOSE (£m	0.0010	0.0012	0.8259	0.4167	-0.0014	0.0033	-0.0014	0.0033
OJEC-PB DURATION (days)	-0.0004	0.0003	-1.3397	0.1924	-0.0011	0.0002	-0.0011	0.0002
PREFERRED BIDDER DURATION (days)	0.0008	0.0004	1.7976	0.0843	-0.0001	0.0017	-0.0001	0.0017
PB-FC AS % OF OJEC-FC DURATION	-0.8430	0.5471	-1.5409	0.1359	-1.9698	0.2837	-1.9698	0.2837
CONSORTIA BY CODE	-0.0004	0.0036	-0.1263	0.9005	-0.0078	0.0069	-0.0078	0.0069
INTEGRATED (0) / NON-INTEGRATED (1)	-0.0331	0.0568	-0.5833	0.5649	-0.1501	0.0838	-0.1501	0.0838

RESIDUAL OUTPUT

Observation	*Predicted % PRICE CHANGE PB - FC*	*Residuals*	*Standard Residuals*
1	0.2306	-0.1001	-0.9715
2	0.1415	0.0206	0.1998
3	0.1616	0.2615	2.5367
4	0.3093	-0.1578	-1.5305
5	0.2073	0.2328	2.2587
6	0.1364	-0.0055	-0.0532
7	0.1837	-0.0573	-0.5554
8	0.1384	-0.0299	-0.2898
9	0.1121	-0.0287	-0.2787
10	0.1503	0.1951	1.8928
11	0.0877	-0.1014	-0.9837
12	0.0810	-0.0581	-0.5635
13	0.1064	-0.1064	-1.0320
14	0.0977	-0.0977	-0.9475
15	0.0758	-0.0332	-0.3217
16	0.0978	-0.0978	-0.9492
17	0.0997	-0.0997	-0.9670
18	0.1173	0.1742	1.6895
19	0.0133	-0.0133	-0.1287
20	0.0342	0.0252	0.2443
21	0.1530	0.0627	0.6086
22	0.0873	0.1568	1.5210
23	0.1908	-0.0100	-0.0967
24	0.0236	-0.0236	-0.2285
25	0.1225	-0.1118	-1.0849
26	0.0490	-0.1010	-0.9802
27	0.0378	0.0039	0.0376
28	0.0116	-0.0163	-0.1584
29	0.0519	0.0481	0.4670
30	0.0162	0.0558	0.5417
31	-0.0100	0.0633	0.6142
32	-0.0038	0.0038	0.0366
33	0.0166	-0.0157	-0.1521
34	0.0387	-0.0387	-0.3752

Custodial - Pearson Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	NPV @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.785	-0.728	0.413	-0.702	0.556	0.354	***-0.217***	-0.429	-0.572	-0.076	0.421
DATE OF OJEC/OJEU		1.000	0.981	-0.061	0.968	-0.444	0.017	***0.383***	0.729	0.660	0.427	0.026
DATE OF PREFERRED BIDDER			1.000	0.090	0.998	-0.276	0.173	***0.439***	0.839	0.549	0.486	0.153
NPV @ PB (£m)				1.000	0.146	0.843	0.988	***0.107***	0.516	-0.251	0.240	0.523
DATE OF FINANCIAL CLOSE					1.000	-0.220	0.227	***0.439***	0.867	0.525	0.494	0.187
CAPITAL VALUE @ FINANCIAL CLOSE (£m)						1.000	0.813	***-0.004***	0.230	-0.653	0.160	0.515
NPV @ FINANCIAL CLOSE (£m)							1.000	***0.256***	0.603	-0.263	0.238	0.527
% CHANGE PB - FC								***1.000***	***0.598***	***-0.248***	***-0.022***	***0.061***
PREFERRED BIDDER DURATION (days)									1.000	0.135	0.415	0.329
PB-FC AS % OF OJEC-FC DURATION										1.000	0.050	-0.330
CONSORTIA BY CODE											1.000	0.737
INTEGRATED (0) / NON-INTEGRATED (1)												1.000

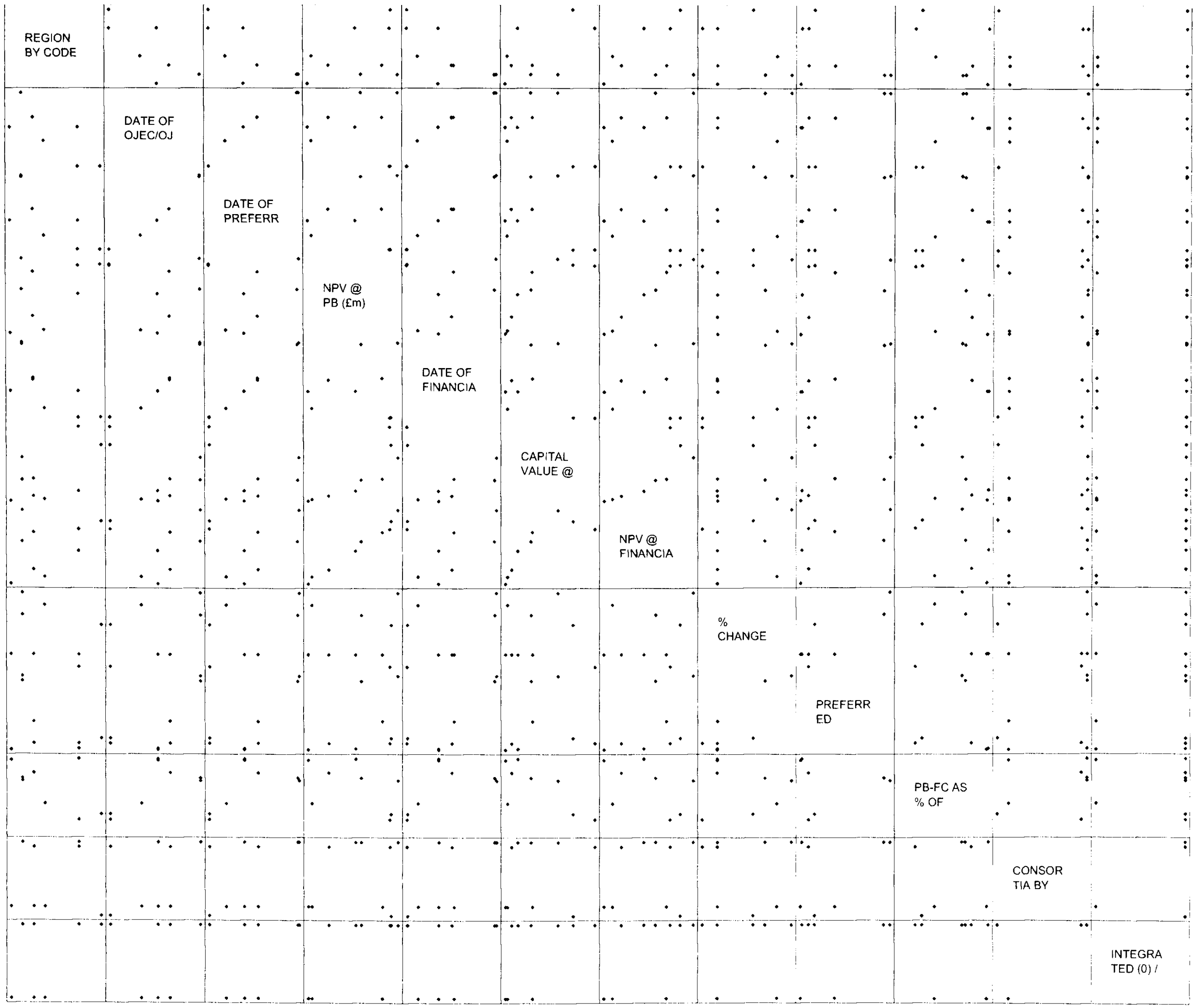
Custodial - Pearson Probabilities

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	NPV @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	-	0.021	0.041	0.309	0.052	0.152	0.390	***0.605***	0.288	0.138	0.857	0.299
DATE OF OJEC/OJEU		-	0.000	0.885	0.000	0.270	0.969	***0.349***	0.040	0.075	0.291	0.951
DATE OF PREFERRED BIDDER			-	0.832	0.000	0.508	0.682	***0.277***	0.009	0.159	0.222	0.717
NPV @ PB (£m)				-	0.731	0.009	0.000	***0.800***	0.191	0.549	0.567	0.183
DATE OF FINANCIAL CLOSE					-	0.601	0.588	***0.276***	0.005	0.182	0.214	0.658
CAPITAL VALUE @ FINANCIAL CLOSE (£m)						-	0.014	***0.992***	0.583	0.079	0.706	0.192
NPV @ FINANCIAL CLOSE (£m)							-	***0.540***	0.114	0.529	0.570	0.179
% CHANGE PB - FC								-	***0.118***	***0.553***	***0.959***	***0.886***
PREFERRED BIDDER DURATION (days)									-	0.750	0.306	0.426
PB-FC AS % OF OJEC-FC DURATION										-	0.906	0.425
CONSORTIA BY CODE											-	0.037
INTEGRATED (0) / NON-INTEGRATED (1)												-

Custodial - Spearman Rank Correlations

	REGION BY CODE	DATE OF OJEC/OJEU	DATE OF PREFERRED BIDDER	NPV @ PB (£m)	DATE OF FINANCIAL CLOSE	CAPITAL VALUE @ FINANCIAL CLOSE (£m)	NPV @ FINANCIAL CLOSE (£m)	% CHANGE PB - FC	PREFERRED BIDDER DURATION (days)	PB-FC AS % OF OJEC-FC DURATION	CONSORTIA BY CODE	INTEGRATED (0) / NON-INTEGRATED (1)
REGION BY CODE	1.000	-0.738	-0.735	0.304	-0.658	0.473	0.304	***-0.251***	-0.212	-0.414	-0.272	0.324
DATE OF OJEC/OJEU		1.000	0.996	0.059	0.983	-0.178	0.059	***0.398***	0.604	0.509	0.608	0.093
DATE OF PREFERRED BIDDER			1.000	0.093	0.987	-0.160	0.093	***0.414***	0.610	0.498	0.605	0.092
NPV @ PB (£m)				1.000	0.150	0.933	1.000	***0.191***	0.787	-0.400	0.156	0.548
DATE OF FINANCIAL CLOSE					1.000	-0.117	0.150	***0.453***	0.644	0.533	0.581	0.091
CAPITAL VALUE @ FINANCIAL CLOSE (£m)						1.000	0.933	***-0.087***	0.636	-0.500	0.069	0.548
NPV @ FINANCIAL CLOSE (£m)							1.000	***0.191***	0.787	-0.400	0.156	0.548
% CHANGE PB - FC								***1.000***	***0.319***	***-0.209***	***0.122***	***0.000***
PREFERRED BIDDER DURATION (days)									1.000	-0.025	0.357	0.458
PB-FC AS % OF OJEC-FC DURATION										1.000	0.147	-0.365
CONSORTIA BY CODE											1.000	0.569
INTEGRATED (0) / NON-INTEGRATED (1)												1.000

Custodial - Correlation Matrix



Custodial Multiple Regression SUMMARY OUTPUT

Regression Statistics	
Multiple R	1
R Square	1
Adjusted R Square	65535
Standard Error	0
Observations	9

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	0.014492	0.00181148	0	#NUM!
Residual	0	3.97E-24	65535		
Total	8	0.014492			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-11.11466	0.0000	65535.0000	#NUM!	-11.1147	-11.1147	-11.1147	-11.1147
REGION BY CODE	0.025264	0.0000	65535.0000	#NUM!	0.0253	0.0253	0.0253	0.0253
DATE OF FINANCIAL CLOSE	0.000296	0.0000	65535.0000	#NUM!	0.0003	0.0003	0.0003	0.0003
CAPITAL VALUE @ FINANCIAL CLOSE (£m)	0.001116	0.0000	65535.0000	#NUM!	0.0011	0.0011	0.0011	0.0011
OJEC-PB DURATION (days)	0.001985	0.0000	65535.0000	#NUM!	0.0020	0.0020	0.0020	0.0020
PREFERRED BIDDER DURATION (days)	-0.004638	0.0000	65535.0000	#NUM!	-0.0046	-0.0046	-0.0046	-0.0046
PB-FC AS % OF OJEC-FC DURATION	1.906559	0.0000	65535.0000	#NUM!	1.9066	1.9066	1.9066	1.9066
CONSORTIA BY CODE	-0.004805	0.0000	65535.0000	#NUM!	-0.0048	-0.0048	-0.0048	-0.0048
INTEGRATED (0) / NON-INTEGRATED (1)	-0.086661	0.0000	65535.0000	#NUM!	-0.0867	-0.0867	-0.0867	-0.0867

RESIDUAL OUTPUT

Observation	*Predicted % CHANGE PB - FC*	*Residuals*	*Standard Residuals*
1	-0.0198	0.0000	-0.4673
2	0.0472	0.0000	0.0918
3	0.0787	0.0000	0.1519
4	0.0000	0.0000	0.8231
5	0.0000	0.0000	0.8333
6	0.0000	0.0000	-0.9370
7	0.0000	0.0000	-0.9923
8	0.0631	0.0000	-1.2359
9	0.0981	0.0000	1.7286

Appendix F List of PFI market interviews

Public Sector:

	Code	Organisation	Name	Role & experience
(A)		Highways Agency	Graham Taylor	Group Manager, Private Finance Policy Procurement Directorate
(B)		Department of Health	Peter Cockett	Policy Manager, DoH Capital Investment Branch (PFU)
(C)		Ministry of Defence	Jon Downing & Charles Joy	Private Finance Unit Project Officers
(D)		HM Prison Service	John Neville	Commercial Advisor, Major Projects Procurement Department
(E)		West Sussex CC	Andy Forsyth	Project Manager - Crawley Schools PFI
(F)		Stoke on Trent CC	Mike Inman	Head of Premises & Client Services, Stoke on Trent LEA, Project Director – Stoke on Trent Grouped Schools PFI

Private Sector:

	Code	Organisation	Name	Role & experience
(G)		Kajima	Robert Longley	Development Director – Kajima Partnerships
(H)		Carillion	Colin McPherson	Commercial Director – Carillion Health
(I)		Skanska	Mark Mugglestone	Bid Director – Skanska Integrated Projects
(J)		Interserve	Mel Holloway	Group Business Development Manager – Interserve FM

Appendix G Interview cover letter

Dear Mr...

My name is Grant Armstrong, and I am a graduate student at University College London undertaking an MSc in Construction Economics and Management. I am currently writing a research report on ***Price Creep during the Preferred Bidder negotiation stage of UK PFI projects***, and as part of this research I would be interested in conducting an interview with you.

I have already compiled data to establish the *extent (or absence)* of price creep in the PFI market (looking specifically at the healthcare, education, prisons and roads sectors), and now hope that an interview will help inform the *reasons for, and issues surrounding* price creep. I am interviewing participants from both the public and private sector (10-12 interviews in total) at the level of Bid Director or Department Head in an effort to discuss strategic as well as general project issues.

While the semi-structured format of the interview will allow you scope to discuss anything you feel is important to the topic, I have listed general points for discussion below to provide an insight into my current focus:

- Relational Contracting
- Preferred Bidder Duration
- Time - Historical change and key events
- Time - Fiscal / Accounting year
- Project Size
- Affordability & Scope
- Risk
- Organisational Learning
- Bidding / Procurement Costs

I hope that this research will be of benefit to your organisation by adding to any existing PFI market or sector knowledge you already have, and I will be pleased to share the results of the completed report with you. The research will also be available in the Bartlett Library at University College London, but I would not disseminate it further without prior permission.

I will follow up this email with a telephone call in the next few days to discuss further the possibility of arranging an interview, which I envisage will take around one hour, at a time and place convenient and agreeable to you.

Thank you for your consideration.

Kind regards

Grant Armstrong

MSc research student
Bartlett School of Graduate Studies
University College London

Email: g.armstrong@ucl.ac.uk

Appendix H Public and Private Sector Interview Questions

PUBLIC SECTOR INTERVIEW

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price creep during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?

- Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price creep in projects you have been involved with?

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? - Were the use of BAFO or FITN extended clarifications influential?

F) Time - Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price creep has changed from earlier to more recent projects you have been involved with?

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price creep at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price creep on the projects you have been involved with?
   a) size / scale

b) Capital value
c) Project complexity
- How do you view the relationship between these factors?

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PRIVATE SECTOR INTERVIEW

A) Introduction

4. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

5. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

6. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price creep during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price creep issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

6. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

7. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

8. Describe the extent and type of investment your organisation makes in PFI related staff training?

9. Has your organisation worked with the same public sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with - this can be at any level - tactical to strategic.

C) Relational Contracting

4. Describe the relationship between your organisation and your public sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

5. How did think the quality of the relationship influenced any movement in price during the preferred bidder negotiation phase?

6. What influence did the financier have on:
   a) Your relationship with your public sector partner?
   b) Any changes in price during the preferred bidder negotiation stage?

D) Sunk Costs

2. Approximately how big (as a % of project value or relative to one another) were bidding costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

3. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - If yes, please elaborate...

E) Preferred Bidder Duration

5. What was the influence of the duration of the preferred bidder stage on any price creep in projects you have been involved with?

6. Describe the influence of the existence of inflation (MIPS uplift) on price change?

7. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

8. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Was the use of BAFO or FITN extended clarifications influential?

F) Time - Historical

3. Describe how average relative price creep has changed from earlier to more recent projects you have been involved with?

4. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

G) Time - Fiscal

2. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase generally and price creep specifically?

H) Project Size

2. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

I) Affordability & Scope

3. Describe any affordability issues that arose during the preferred bidder stage?

4. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

2. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

K) Opportunism

4. Describe any examples of what you consider to be opportunistic behaviour by the public sector partner during preferred bidder negotiations? i.e: that maybe resulted in you questioning the worth of continuing with the project?
   - What was the influence of this on any price change?

5. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

6. What do you think would be the effect on your reputation & the reputation of the public sector partner, if having got to preferred bidder you fail to reach financial close?

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

Appendix I Interview Transcripts

PUBLIC SECTOR INTERVIEW - Graham Taylor - Highways Agency 22 July 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

   I am the gatekeeper on PFI here at the Highways agency. I develop contracts and to a degree have a responsibility for the signed contracts also, so if any major issues come up such as refinancing or a major change in the contract then I would expect to negotiate that.
   At the moment we are working our own M25 project. Most of my time goes on that - there are thousands of stakeholders to talk to and the contract has to be adapted to suit them as much as we can. I work with a project manager, who will actually take the project through the negotiation stages with support from me. He works in a different part of the organisation from me. I am in the procurement directorate. We have a delivery organisation which is called major projects, which is responsible for delivering anything of any size in the agency. So that's where the skills lie in the agency. I have been doing this for the last 17 years, obviously predating PFI. The first serious work I did on Private Finance was our 2nd Severn crossing, which is not PFI but is still private finance. I then set up with others the DBFO initiative for roads in 1994/95. I have been with it ever since.
   I have a big team of advisors, there are very few people in the agency who are involved with this, so I get the work done through advisors. You may think this is an expensive way of doing things, which it is, but on the other hand many of the skills we are after are not available within government, so we buy them in the marketplace. We have had the same firms advising us centrally since we started - many of the same people in fact, which is a great advantage. There is no relearning which is useful. We work very well as a team which is valuable. All the more so when we are approaching this next project which is vastly larger than anything else we have done before. The M25 widening, is actually completing the widening that started about 20 years ago. There is about 100km to complete and that will take us 7 years to complete as a PFI, compared to 20 years under conventional procurement. The only problem is how to fit it in with the Olympics. The Olympics pose all sorts of problems - there are real timing issues as to when we dig up the M25. The Olympics had never been a part of planning, none of us seriously expected London to win.
   Market capacity is a huge issue, the last time we had anything approaching the size of the Olympics in the London area, which was Canary Wharf, it sucked all the skilled people out of the industry and prices just went through the roof. So it is a big issue for us to consider. There are lots of roads being built on the site of the Olympics also. It was always going to happen, but not in the same time scale as now.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   Firstly, I think it's fair to say that we have seen virtually none (in the Highways Agency). There is always enormous pressure once you are down to one bidder. His shopping list grows ever longer in terms of how much money he *wants. But we know that's what he'll do, so we're prepared for it, and we spend a lot of time trying to keep a lid on the project.*

The only time I can think of where prices have actually risen from the BAFO stage to the execution of the contract is where the specification has changed - in other words scope change. How we have got away with that I really don't know. Obviously scope change as a client requirement is legitimate. It could work the other way too where the private sector found a more robust solution to something, but we have never had that, but in theory it's possible.

So yes there is huge upward pressure on price, but I think that we have successfully contained it. We have 10 projects awarded in England, (Awarded 11, but the A13 transferred to Transport for London TfL). So we have 2 that are still at construction, which is the A249 in Kent, and the Darrington to Dishforth Project in Yorkshire. Everything else was amazingly awarded in 1996 (8 projects awarded as part of tranche 1 and 1a). The reason for the big gap was a change in Government. We had tenders out and tenders returned on three projects at the time of the Labour government coming to power in 1997, and they decided that they wanted to abandon all of those. Any government coming back in after a long absence will want to review all existing programmes, and that's exactly what they did. We spent a lot of money compensating bidders. Projects about to go to tender were abandoned also, with the exception of the A13, which was part of a larger infrastructural brownfields development.

Then the programme approach that we had in the past was replaced by something called the TPI (Target Programme for Investment) which was a far smaller programme than we were used to. It focused on solving particular problems. Out of that we looked for new private finance projects. We had identified the whole of Kent in motorway terms, as potential, however we could not see a way through that due to a pinch point at Maidstone on the M20 which needs widening, which kind of wrecked its potential as a private finance project.

All those original 8 projects (1996 Tranche 1 & 1a) were chosen quite deliberately for their difference - the Conservative government were very keen that we should very rapidly explore the potential of PFI for roads. So they were chosen because they were as different as possible from one another in terms of conditions, and what was required to be done - size in terms of capital value and net worth, and what the responsibilities were. They ranged from a completely new piece of motorway in Yorkshire worth about 250million, that had no existing network to link into to the A69 project in Northumberland and Cumbria, which had a tiny single carriageway and bypass worth about 10million, and 79kms of existing road to look after. So very different balances to look after.

So what we believed at the time and have discovered over time, is that the most attractive projects, in terms of the comparison between our public sector comparator and the expected outturn costs of these projects, is that the bigger they are the better (from our point of view). This is because at the simplest level, when you do a PFI there are a lot of fixed (procurement) costs (Banks, advisors,) These are not much different whether it's a 20m project or a 200m pound project. There are more or less the same level of costs for the sponsors of the DBFO companies, so it stands to reason that if you try and spread those over a small project they will loom quite large. So it's more difficult to make a small project work. There are some economies of scale in terms of procurement / development costs.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   The advisors are the rock upon which a lot of the knowledge is built. The agency, in common with a lot of other public organisations likes to move its staff around a lot. We have people who have considerable knowledge of particular PFI projects that they have managed or been involved with. We move them off the job quite rapidly, but they may come back again. It's the way it goes, its not necessarily deliberate strategy. I have a colleague that works in the Bedford office that has had at least 10 years experience in PFI. He has collected a huge amount of knowledge about the 'back end' of projects. In regard to storing the information gathered, we produce a number of manuals, e.g. 'Guidance to Transaction Teams', that are stored electronically and available online. These manuals 'tell you how to do it', and we would expect them to have a reasonable shelf life, after which they are reviewed and updated again. These are an entirely internal operation, but involves our central technical consultant who essentially has day to day editorial control and responsibility for it. They write it up and I read it and check if I'm happy with it. It is really cradle to grave stuff, outlining process all the way through. It includes draft letters and reports.
   That how we keep the knowledge in. A lot of it is still in my head, which is a bit of problem.
   Both the project team and central procurement have access to this data. The first thing we do when we have a new project is to set up a transaction team (a project team) which is there to deliver the project. On that team is agency staff, specialist advisors (mainly technical at that stage, although there will be legal and financial representation also) That team will exist all the way through until the contract is signed. It's the team's responsibility to get the tender documentation produced. Separate from that is the central team that I run, and although they have a lot to do with each other (the central and transaction teams) they are separate and distinct organisations. The central team sets the policy and determine how it's going to work, while the transaction team has to make it work.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   See 1 above

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   We train in particular, and one thing that is fairly unique to PFI, is that negotiation is not something that we normally do with our contracts - in fact the law does not allow it. So for these we do train our staff fairly intensively. We take them away over several days and give them the hardest time of their lives. We keep them up all night, don't give them anything to eat - try to make it as realistic as possible. This is in terms of commercial negotiation. A lot of time is spent in these projects with two teams facing each other across the table, hammering away usually over the most insignificant points, the major issues are not usually discussed to the same level of intensity. It is a skill that we would not usually have at the agency, so we do the training. The private sector contractors found out that we were doing this and wrote and complained - outrageous.

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   The reliance on advisors changes a great deal. At every stage the advisors are important, probably no more so than at the negotiation stage, where their involvement and behaviour is absolutely critical to the success of the negotiations. What should happen, is that even if our advisors are a 'complete clown' they should still be able to support everything - we have never had that situation. We have had situations in the early days where the leader on our side (the project manager) has decided that he does not want to do anything himself, so each negotiation is mapped out as to who's going to say what when. Interesting approach, not one I would personally recommend, but it did work out all the same. What tends to happen these days, is that the individual chosen to lead, really does lead from the front. But they could not do it with out the assistance of the advisors because they are all skilled negotiators - it's part of their normal activity to do this sort of thing. They are absolutely critical, and I always say to any foreign visitors, lesson number 1:get the best possible advisors you can. Don't go on the basis of cost, go on the basis of what they can do for you. We selected the advisors initially on a quality price examination. They tendered and interviewed. It just so happened that the people that were selected on the basis of price were also the best on quality. Strangely that happened again when we re-tendered the work in 1997. Lately we have been using government framework contracts, which saves a great deal of time and money while keeping the people we want.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   We have worked with the same DBFO company on more than one project e.g the Connect group on the A30 & A50. I wouldn't say that it had any impact at all on negotiations during PB - apart from anything else it is different people on both sides of the table. The operational staff rarely get involved with the negotiations and that applies on both sides, so they will put forward negotiators to run their bid, and effectively we are doing the same thing. The only effect it might have is that we have a prior knowledge of that organisation and how it behaves in negotiations and what issues it finds particularly important.

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

   The relationship is tense. There is a huge amount at stake. They all price most of the work too low, so they are worried about whether or not they are going to cover their costs. What sometimes happens (its happened to us a few times) *and I'm not saying it's to our disadvantage, is that having won the project, perhaps at a price that is unsustainable, the private sector PB will then redesign the project. This is easier to do on some projects (greenfields site) that others (road widening). We have seen some significant changes to the design, but it still delivers what we want e.g. the use of concrete rather than steel motorway carriageway signage gantry structures which they consider to require less maintenance, be more durable, and slightly cheaper to construct. However it is my view that they are aesthetically inferior, especially from the air with their chunky profile. Any changes are subject to the equivalence test (does it provide the same quality, the same service etc). If it does, then that's fine. If it doesn't then its chucked out again. This is not a change in scope. Scope is a good word to define what it is we want. They are instead changing the way what we want is delivered. It puts strong downward pressure on price generally. It also puts pressure on the highways agency to make sure we are maintaining VFM - because we are open to challenge from other groups that weren't successful. So we have to make sure that it's quite clear that they still have to deliver what they were told to deliver in the first place.*

The formation of teams, and co-location usually occurs after financial close, rather than at the PB stage. There is however a serious effort put in these days to establish partnership down to a personal level. They usually go off for joint team building exercises. Particularly on the early projects, little attention was paid to partnership, the later ones much more so. The attitude on a lot of these contracts is not really a partnering attitude - they can be adversarial during contract negotiations - but they are delivering what we (the highways agency) want. It's just that in some of them the atmosphere is just more cordial. I don't think this difference in relationship has any relevance on price, or changes in price.

3. What influence did the financier have on:
    a) Your relationship with your private sector partner ?
    b) Any changes in price during the preferred bidder negotiation stage?

    This sounds flippant but it's true: the financier can almost wreck the project, and on a number of occasions they have by delaying the signature at Financial Close simply because they have piggy points they want to keep raising with us. This often comes out of due diligence. The view in the market at the moment is that if you go for a separate competition for finance, which is what we are planning to do for the M25 widening project, then this opportunity is largely got rid of, or it certainly means the banks are pretty much emasculated, because the contract has either been signed or is more or less there. We may well sign ours before we go out for money, which would mean it would be very difficult for the banks to make major changes. But we need an insurance package to make sure that doesn't raise too many issues - and one way around that is to employ a firm of lawyers to represent the bank's position generally. So hopefully we emerge with a contract that does not cause too many difficulties for the banks.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
    a) At appointment of Preferred Bidder
    b) Just before financial close

    I have said for some time at public conferences the winning bidder and the client can easily spend 20million pounds, which is split roughly equally. This is generally regardless of the size of the project - although because the M25 project is a lot bigger we will probably spend a bit more than that.

The trend is that the period between the preferred bidder identification and the signature has been getting longer, and time is money. So a greater proportion is now being spent during that period, although I don't have any figures for that. We have had BAFOs up until now but it was never guaranteed, but with the M25 project we are going to try and make sure that there will be no BAFO. I not convinced that the elimination of BAFO will shorten time or save money, but we are going to try and eliminate it from the next project.

We have only ever called the preferred bidder the provisional preferred bidder. In reality there is no difference, and in fact we refer to them as the provisional preferred bidder right up until the moment we sign the contract.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - if yes, please elaborate...

   I don't at all, no.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   The unhelpful contribution made by the banks and their lawyers - that's the major influence at that stage. I don't think the duration necessarily has a knock on effect on price - it would have to be a long period before the price started to naturally go up because of inflation.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

   This was not a factor. The construction cost as far as we are concerned is a lump sum - how that's actually handled in the contract between the SPV and the construction company is of no great concern to us, although it is a concern to the lenders. The contract payments are indexed throughout the life of the contract, and the index may be based on the RPI (Retail Price Index) or it might be based on the Baxter formula, which is assume MIPS is referring to. In the civils industry we use something called the Baxter index, which is a monthly publication which tracks price movements in labour with particular skills and materials. And a Baxter formula is a compound of a range of these indices, commonly used in civils for projects with a long delivery period. In government we only allow indexation in ordinary funded projects if they last 2 years. It wont have an effect on the price that's agreed during the preferred bidder stage.
   The tender documents we send out all have outline programmes for delivery. So I suppose that if we went seriously awry then they may well have a case for saying our price has gone up - although we have never had that.

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   What they are effectively bidding to us is a payment regime - the unitary payment. It is that which the competition is judged on. So it is the expected NPV of those payments. The amount they say they need to service the contract.

   We haven't had the situation where the fixed price has expired.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Were the use of BAFO or FITN extended clarifications influential?

If it did have an influence then it was not noticeable - so I would say it did not have an influence.

F) Time – Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   I think it is impossible to compare in the civils sector. I think if you are building hospitals, or schools you can get pretty close to a reasonable comparison. Civils is always unique, and it is very difficult. When I first joined this place 38 years ago (the agency didn't exist back then but the jobs obviously did) it was said that rural motorways cost 1m per mile. Well I can say today that they cost 30m per mile. But if you're building a lot of motorways you can do simple sums that will give you those kinds of answers. If you looked at all the projects we have done as PFIs and compared them, you would find a huge range of price procurement. It is very difficult to compare. If we had done a larger number then maybe we would be able to see more definite trends. What we do is trying and keep track of main pricing influences e.g. the price of concrete is monitored by our own QSs, and we try and use that as a basis for checking prices frequently whether it's PFI or traditional procurement. The straight quantum is difficult, especially with bridges because there just aren't enough of them being built.

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   There have been some external political influences - that A13 project I mentioned, it was known by tenderers all along that that would end up with TfL and that in all likelihood Ken Livingstone would be the ultimate owner of the contract. That had an effect on a number of tenderers, who were quite nervous as Ken Livingstone is not a huge fan of PFI and he makes it widely known. So there were certain worries, particularly among foreign investors, that he could wreck it all, and while I don't think it pushed the price up it did make them more resistant towards taking on more risk.
   The 1997 election and an incoming Labour government was not seen as a problem. They said a lot of harsh things about not building new roads, but discovered that they needed to.

G) Time – Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

   In our experience this is accidental, it is not the financial year but our getting short tempered that tends to push the particular date of financial close. We like to award these contracts in the Autumn, so then the DBFO company then has the winter to do their advance works, the essential pre contract conditions, and design (so you get design and build rather than build and

design). But what happens is that negotiations drag on and christmas comes and goes and it slips through to March and spring. This does not make us happy, at which point we push very hard to get the deal signed. The last project got signed because I 'threw a wobbly'. I said that if they didn't come to the table in the next 24hours then we would be walking away from it - and they signed the deal that night.
This pressure or desire by us to get the deal done has had no discernable influence on the price, or price change - but I'm not saying it's not an influence, just that I haven't seen it.
The contractors price, which is usually the most important thing, usually holds good for x months. The x months will include quite a lot of flexibility around our provisional programme that we put in the tender documents. We have never gone that far away from the programme that that's been put at risk. But if it goes another 9 months or so past the programme then clearly the price is going to go up - the contractor can't hold it.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   I don't think that price drift is effected by size or capital value - I'm not saying that they can't be, but I don't think that they are the drivers. The drivers are more likely to be for example that the price of bitumen has doubled in the 6 months - oh god we didn't cover that in our price. What is going to cause drift is that maybe they have discovered that they haven't priced something, maybe too much time has gone by and the prices they quoted are really no longer valid and suppliers will not quote to those prices. Maybe they have blown their bidding and negotiation cost budget and they need extra money to cover that. These are not things we have actually experienced however.

   Project complexity: One of the groans that the industry usually has - and they say that at least you don't have that problem with roads. With hospitals for example, there are so many people who regard themselves as the client - we are the (single) client on behalf of the nation for the roads. In health the people who are in charge of the negotiation often have the rug pulled away from them because the clinicians come along and change the specification or scope - and the pricing increases as a result. We don't have this problem, and nor should the health service, but it is much more difficult controlling departmental heads (organisational complexity). This is not just a problem in PFI, but more general procurement also.
   The biggest problems we have are generally with statutory undertakers, where my standard desire and advice to colleagues is that if we can possibly do those works before we come to do the main PFI works, then we should do them. This is because they will always play games with PFI contractors, and its quite important to us because legislation allows us to get quite big discounts from utilities in terms of the cost of the works. And utilities will often try and fight giving discounts to DBFO companies, even if we say we have delegated our function to them. We have much more leverage than the DBFO company in this situation, but we often don't have the money to spend on those early works - there is a lot of resistance within the agency to spending that sort of money.
   We don't pass on the risk of obtaining statutory consents. In fact, a good example is the first time we have had to pay compensation for delayed entry is on the Darrington to Dishforth project, where Network Rail took much longer than expected to come to an agreement with us about when certain railway possessions could take place. The agency misjudged the behaviour of

Network Rail (assumed they would operate similar to Railtrack) These negotiations with Network Rail then went on the critical path of the DBFO contractor, who made a claim which cost us quite a lot of money. But the DBFO contractor was being delayed by the agency's inability to give them the land they needed to work on. (a fundamental part of the contract was that the agency gives the DBFO contractor the land on which to build at the time they need it). We have only had one of these cases though.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   They haven't and they don't and they shouldn't. The reason I say this with such confidence is that these projects are planned for years, and how much resource we are going to absorb is widely known and understood. Apart from the M25 which is a very large project, the costs of any DBFO are a very tiny proportion of our whole budget - we will spend 2.5bn a year.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

   I don't think it really has, not that it is not possible, but we generally have things sorted out before going out to the PFI market.

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   It is perfectly possible that risks could be reallocated in that phase, though we would usually expect them to change before the PB negotiation phase. Our approach to risk is simple in the extreme - what we say in our tender documents is that we list here the risks the state is willing to bare, and we list here the risks the state is willing to share, and all other risks (those not listed and not listed in the contract either) are to be borne by the DBFO company. They have got used to this and they accept. They indemnify the agency against more or less against anything that they do not do properly. Certainly in the first five years of the original PFI projects they were discovering all sorts of things they did not realise they were responsible for e.g. rats in lay-bys and notifiable weeds.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   The private sector will try everything under the sun, not all of them will but some of them do.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   If you are in the fortunate position where the reserve bidders price is close to the preferred bidder then you can really use this. But if there is a large gap, (which is the case as often as is the case that they are close) then you are not in a very strong position, because the chances of the reserve bidder improving their price by that degree is pretty remote.
   The really effective reserve bidder is the public sector comparator - we use that to quite good advantage, as long as you don't tell any lies. We have used it more than once in PB negotiations to persuade the PB that they have got to keep their price down - and it does work. It is a realistic threat - we might decide not to award the contract which is an option we always have. The biggest issue with doing this is that it's a political issue - at the end of the day delivery of the product may be the most important thing in some political circles, over riding the VFM argument.

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   We have often said, and I know that the previous head of the treasury PFI unit would have liked to, in fact I'm not sure if they actually did, sack the DBFO company either just before we were due to sign or maybe during the construction phase. My thinking at that time was that it would do the industry no harm, and it may strengthen the agencies position quite a lot for the industry to see that we really are capable of doing things like that. Especially for people that are misbehaving. We have not seriously considered this in practice. Walking away from a tender is potentially very dangerous, which is why the agency was keen in 1997 to properly compensate when they withdrew the 3 PFI projects from the market. Other people have done it and got away with it - e.g. the Scots had tenders back on a project in the early part of 1997, which was cancelled due to a restricted budget being reallocated to the building of the Scottish Parliament. They offered no compensation and have got away with it, and it has not stopped private sector tendering for future Scottish PFI roading contracts.

   We have managed to protect ourselves from a lot of outside influence. This should not be interpreted in a negative sense. Our contract has developed organically since we started - if you were to analyse the amount that remained since the 1994 version you would be astonished at how much is still there. The industry quite likes it because they have become use to our contract, but it does not stop them trying to tear it apart - but that's all part of the game.The only thing that we have really changed over the years is the way we pay. And that has been partly political influence and partly searching for something more satisfactory.
   Our contract has grown and we have changed it for logical reasons - other sectors have not had that luxury. Prisons probably have, health is all over the place, but they have had a much bigger programme than we have had. The other interesting area is defence, who up until recently have had a number of different PFI units within the organisation, really producing some quite different projects. It has all been brought together now under one unit.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PUBLIC SECTOR INTERVIEW - Peter Cockett - MOD PFU / CIB 10th August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

   I'm the policy manager of the Capital Investment branch of the Department of Health (DoH). This is effectively the PFU for the DoH. The PFU was set up in 1996, and I joined from the public sector in 1997.
   I have mainly been involved in the briefing and parliamentary side of things, and then also working on preparing guidance. I have also approved three of the smaller PFI projects.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   We started out with just the procurement routes, and we had a BAFO stage. The essential point was it was 2-1 and you had to have firm price bids and a fixed price bid when you were the preferred bidder (PB). Historically on all schemes, one has to say that there has been financial creep up to financial close (FC). To try and minimise this we introduced a PB letter 2 years ago now, and this has become more and more refined. This sets out formally what things we agree on, and where more work needs to be done i.e where there might be a case for an increase in price. And also set out various conditions such as the inflation consequences - e.g. it would say if when not at FC after quarter 1 then MIPS xxxx price, then maybe after MIPS 2 or 3 we would say we reserve the right to re-examine the scheme.
   The two real reasons for price increase are that there will always be clarifications over the detailed design aspects of the specs which will always cause an increase in price. Some of it maybe we would say either it is the private sector over engineering things or us over engineering things, or sometimes it may be because we are in a moving environment, so a new initiative might come out from the DoH - so they are DoH driven. The NAO have done a report on that and they concur. e.g. the latest thing is we must have more isolation rooms, and NHS consumerism before that, then the NHS plan which required more beds. So that is the main driver.
   The second one is the inflation. In the health sector it is very well established that MIPS is the indices that is used. There is a discussion going on at the moment about indexation. Although MIPS measures building cost inflations, the private sector will price in what it sees as MIPS+ factors which includes the servicing element - staff costs which may increase at a different rate to the construction element. If they take a view, then that might increase a bit more. The basic construction costs can be agreed upon, and it's going to be one of the negotiating points about whether we think any further increases due to the delays for other factors are reasonable.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   The main way we take on lessons is through a mixture of civil servants and consultants either on secondment or who have joined full time as self employed consultants. They are a mixture of legals, QS types, financials and they are all assigned the major schemes. We used to do smaller schemes, but it is basically all the schemes we have to approve centrally - we have the delegated limits in the NHS - below a certain level the NHS Trusts can do it, then it's the SHA's (Strategic Health Authorities) then finally it's the department (DoH) and then its Treasury. Anything that comes here is over 25m. We did have a prioritisation system where projects would come up in waves, but now we have analyse potential projects on a case by case basis. So we see them and assess them from a very early (SOC - Strategic Outline Case)) stage and we are very closely involved with them even before they go out to OJEC. So by that constant process - we go out to them with existing guidance and they come back to us with problems and through that feedback loop that is then disseminated through various means. We have a PFI electronic newsletter which because things are so fast moving we have found very useful. We found that the effectiveness of the original large volume guidance was quite limited due to the fact that things are fast moving and changing, so we have moved away from that 'big bang' approach to a more frequent dissemination of smaller pieces of information - very much a more modular system that is more easily updated. The general guidance on the website is aimed at the PFI market in general, while the newsletters are aimed particularly to NHS Trusts.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   Here we are still a mixture of civil servants who do internal training courses, and we also need experts with specialist knowledge on both the financial and legal side.
   At the trust forums and the capital network forums which involves all the people in the SHA's as well, which is a very formal and well established organisations like that to ensure that everyone has the latest advice. We are cascading knowledge down.

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

   Each trust selects there own advisors. We have refined the PQQ's on which the trusts appoint their bidders and consortiums, so they now have to take in certain key factors.

5. Has your organisation worked with the same private sector partner on multiple projects?

- If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   During the PB stage it is hard negotiations whatever way you look at it. One can't make too many generalisations, but they have their ups and downs and it's just the facts of life. We'd all like them to be all happy and get on with them all the time, but they are commercial deals you are striking. We are in a hard bargaining situation and that's what's meant to happen so I don't think we should be too pas about it.
   They consortia will try and minimise their costs until they are appointed PB, so there is an element of 'we will only look at this seriously once we are PB' and then this results in the real hard negotiations (at that stage). This is a point that the MCG (Major Contractor Group) has made to us, and we realize that that is a fact of life. The whole aim of recent initiatives has been to get people to do a lot more work (on both the public and private sector sides) at a much earlier stage. That's why there is more concentration now on even before the OJEC stage getting project details organised - there is work going on here (in the PFU) on getting new formal guidance towards that aim, especially in the ITN documents. So more frontloaded effort and focus.

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

   Quite a lot of the points that arise during the PB stage will be driven by the funder's advisors. The funders and their lawyers only become really engaged once PB is selected - that's when they take a serious interest. The problem with trying to get them involved fully earlier, is that it is not until after PB that you sometimes know actually what your funding route is going to be - bond or bank debt. So it's a tricky one. We do request that the bidders hold a funding competition.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   They are still wobbling around quite a bit - they can be anything from 2% to 5% up to FC. There are definitely economies of scale so the bigger ones have a smaller percentage, which has been recognised by Treasury who don't advise doing deals below 20m as they don't engender VFM.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - if yes, please elaborate...

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   All the various factors have a knock on effect on each other - the longer you negotiate and argue over design, the longer you have to adjust for inflation - ergo your SWAP rates and LIBOR rates are all going to change, financing might become more expensive it may become less. There is always a number of factors impacting on one another at the same time.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   The PB letter just sets out scenarios, there is not necessary a fixed point. e.g. actual contents of a PB letter: 'if financial close occurs after 31st December 2005 then your construction price will be increased in line with MIPS. In the event of delay beyond 31st December you will endeavour to re profile your bid in conjunction with the Trust. If financial close is not achieved by 31st March 2006 the Trust reserves the right to terminate the project as set out in paragraph 2.3 of volume O of the ITN'. So it is a matter of negotiation between the parties.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Were the use of BAFO or FITN extended clarifications influential?

   The next focus here (at the PFU) is to frontload the work, so it's much more about OJEC and the FITN, and that's the other way of nailing down the PB. MCG are constantly asking / telling us to reduce the number of stages to 1 stage and have 2 bidders only, and 'let the best man win'. While that is ideally how they would like to run it, our view is the more competition the better. Also, the more you have a structured process that gradually nails down, so by the time you reach PB you really have gone through it. This is especially the case on the design side, which is why we introduced the design protocol document (DPD) of which the first version came out in 2001, and has since been revised. The aim of this is to try and introduce more clarity and transparency into the process. But to be honest, these arguments will go on, and there will always be tension in the process - the wants and needs of the public sector vs the wants and needs of the contractors.
   The DPD2 resulted from a request from the private sector to examine the issue - they believed that the trusts are giving the them design ideas, there was no consistency and that they were wasting their time. So we introduced this very prescriptive, structured process and now we have the private sector saying this is much too scriptured. This is an example of the tension that is at play. So this was an attempt to introduce prescriptiveness in the process rather than in what we want the product or service to be, but the key word is transparency. DPD is a key document. The output specs are very detailed in the hard and soft FM sections, and this was introduced to block a problem that had arisen for the purposes of risk transfer - unless you specify each statutory requirement, and you can imagine how many hundreds there are in the NHS, then it's very

difficult, unless they are nailed down at a very early stage, for anyone to start arguing about the minutiaes of risk transfer. And that was specifically what those were introduced to do, so if you look at each one it starts off 'The Trust must obey Statute.... And HBN...' So that was brought in so everybody was on notice on what Statutory responsibilities had to be observed and who by.

F) Time - Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   See above

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   I think we have covered this above.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

   I think what you find is simply they have a finish date, but things tend to drift and it takes milestones to concentrate the mind. In regard to December, the end of the year seems to concentrate the mind, and if that target is missed then you will find that often they will close before the end of the financial year - the end of March being the new milestone. This is the human factor taking effect, but is not necessarily related to any accounting years. Any price effects we need to discuss separately, because however long you delay it will have an impact on the price as quarter 1, 2 and 3 come up - we know that.

   While the main drivers are time and cost, it is not necessarily at the expense of quality. But we live in a particular political climate, where the prime minister agenda had focused on design (civic pride from the PM public design agenda). There is certainly more time spent looking at design now, simply because you have got the involvement of the design review panels, although these tend to be at the OBC and FITN stages rather than the PB stage.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   Complexity is definitely a factor.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   Its really related to a changing environment. The trusts are required to have an affordability envelope at the beginning of the process in the OBC and the public sector comparator, and the bidders have to come in under that. So you have a shadow tariff. In health it's a moving target, with statutory introductions once in the PB stage creating potential scope change and price creep. A good example is the sudden introduction of payment by results, which has thrown the affordability calculations for the Trusts off - they have basically had to start again. Another example is infection control issues and the introduction of more isolation rooms.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

   If you have a poorly scoped project, one of these enormous ones, that goes out to OJEC, there have been instances where suddenly everybody realises that the costs weren't bottomed out and it doubles in price - to get what you asked for it doubles in price. You are then suddenly confronted with that reality and you have to make some cuts, so if you are going to stick with the quality which you would and you are going to make some cuts.
   In regard to benchmarking - it is one of the key functions of the DPD document - because it deals in unit cost for both internals and exterior, the aim of it is that they have to be filled in an your meant to be able to track any increases - it forms the base document for the tracking of changes in scope. On a particular project that is ok, but there is an issue when you are looking at the difference between projects - your base. There is an ongoing discussion as to whether we need benchmarking information like that specifically for construction costs, but it's a changing market which makes it difficult. It's also difficult to strip out other factors from any cost indicies. With the Treasury's VFM changes coming in and the abolition of a PSC essentially - they are asking us to look at factors and do a tracker of increases in cost, and to benchmark it more. At the moment you can relay on the fact that you are beating the PSC in a competitive market, so benchmarking is not as critical - but that will change for the reasons already mentioned. But the key for the PB stage is to track what the bidder is doing and why, making it as transparent as possible - which is what the Design Development Protocol is for.

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   The reallocation of risk is fairly well set now, but there can be very technical little issues that are still current e.g. energy is the latest bid thing and we have a new energy spec. The last one I did related to 'who is going to measure' who is actually going to measure whether the energy targets are actually being achieved and you can obviously argue about the risk transfer in that decision.

   In regard to projects with a high element of retained estate, there are always going to be some projects that are more attractive than others, but that is all meant to be sorted out at a very early stage. It's the point of the early bidders *days and the early market testing / sounding - to come in a discuss what are the pros and cons of the scheme and its market attractiveness. But it's a mature market now and the bidders make their own decisions.*

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   There are examples of where the private sector has 'tried it on' - such as coming back during PB and saying that having reviewed the designs the price has increased by 20m pounds - to see what they can get away with, and when we actually look at it in detail we may end up splitting the difference, but their quoted figure was certainly trying it on. But it is hardball and it is to be expected to some extent, but there are some pure opportunists out there.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   I don't know whether we formally appoint reserve bidders in all the schemes now. There has been no cases where the reserve bidder option has actually been used to replace a PB, so I don't believe it has popped up as a practical proposition to date. There have been a couple of cases where a bidders have dropped out and another bidder has stepped in to take their place. (e.g. Walsall.) But it's a mature market and they all have slots, so if another project falls they may be able to move on quickly.

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   There are very few projects where that has happened, and that was in the days before standardisation and constant attention when one or two of them went wrong, and pulled out at PB stage. These consortia then disappeared from the roster of interested firms. We didn't think they were very good or that keen, and they have not since reappeared (in the healthcare sector). It could have been a result of a strategic decision to exit healthcare.
   If one of the big firms made life difficult and then decided to pull out then that would definitely effect their reputation. They can be nasty in negotiations, but at the end of the day they do make a lot of money out of these projects and are in a highly sensitive and visible area of public policy and it is therefore unlikely that they would called back to bid if they seriously played up.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PUBLIC SECTOR INTERVIEW - Jon Downing & Charles Joy - MOD PFU 5th August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

   The PFU is a central MOD resource which provides the following services: a) the development of PFI policy and guidance b) PFI project Support: advice and assistance on PFI and PPP process to MOD Integrated Project Teams. c) Scrutiny of projects to provide assurance to senior MOD staff which includes undertakes a series of tests to ensure the suitability of projects for PFI, and measurement of the performance of operating projects.
   The MOD PFU was established on 1st November 2004 bringing together previously disparate MOD PFUs into a centralised single MOD PFU.
   The PB - FC phase has been the main priority for the last ten years - and the MOD has 53 signed deals to date. The MOD is a microcosm of the public sector PFI procurement market - having all 'sectors' represented in the MOD PFU. There are 10 different types which include accommodation, vehicle leasing, IT ...
   The arrival of the new head of the PFU - Nick Prior, from Partnerships UK, has injected a new focus into the PFU. He has brought in new people from the private sector, and is rationalising the types of projects that are considered suitable for PFI. This involves selection of projects where there is a clear / discrete scope - clear boundaries make a difference, and the definite requirement for the replacement of an asset to aid a service - there needs to be the right balance of service and capital asset provision. Therefore IT and vehicle leasing projects are not longer considered suitable for PFI. Where there is not a clear scope and the MOD does not require new capital assets, then the use of PRIME contracting is considered more appropriate. This gives the MOD time to better define the scope and by that time the estate will be ready to be replaced.

   The MOD has introduced Integrated Project Teams into its PFI procurement. These teams are continually evolving - they are created for specific projects and then dissolve. There is no such thing as a 'finance team', instead there is an internal project customer who brings finance (e.g.) skills into the project as necessary. In PFI this internal customer comes in the form of
   Customer 1: a requirements / capability manager dealing with output based project requirements at the early stages of the project up until handover and
   Customer 2:The user in service
   Within the project lifecycle the skills required change and therefore personnel are changed accordingly - this goes against a natural desire by project people to want to stay with the project beyond the point at which it is appropriate.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   As an organisation we have had 10 years experience in PFI, with many individuals having 4-5 years experience.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   We have best endeavours in relation to information gathering and use. We are not great at post project evaluation (PPE) of PFI projects, but are aware of this and are currently concentrating on improving this within the organisation. Previously the emphasis had been on 'doing the deal', while now we are starting to pay more attention to looking at the deal in operation.
   We are establishing a central project database, which has been difficult due to the MOD's historic organisational structure (you could say federated), which has resulted in much of the early PFI project information dispersed and difficult to collect, and many of the people involved have moved onto other MOD projects - many not related to PFI.

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   There is a large emphasis on staff development and training within the MOD generally. This is no different in the PFU. There is a requirement for professional membership generally, and the training within the civil service is extensive - there are many civil service trained people within the MOD.
   The MOD has a career development philosophy that takes people on different 'tours' within the organisation, so you have people with a wide range of different experience and background.
   The PFU runs a specific internal PFI course.

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

   We use external advisors extensively - we have a bid budget to contract specialist knowledge from the private sector, which in part stems from a default risk adverse approach. We use them in a phased or contingent way - when required by the 'customer 1'. We use a framework agreement for advisors also.
   In the last couple of years we are more likely to hold the external advisors accountable for the advice they give.

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

We do not deliberately work with or not with the same private sector partner - each project is a separate entity and partners are chosen in relation to the specifics of each project.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   They vary from project to project between 5 - 15%.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - if yes, please elaborate...

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   There was probably no influence of the duration of PB on price drift.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   Yes, as set out in PB letter.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Were the use of BAFO or FITN extended clarifications influential?

The strategy of the MOD in PFI is that the key driver in the projects is the quality (first) and cost (second) of the project. Time (the third element in the procurement trinity) is essentially 'free' - in that the approach is that if we have time we will use it. Although time overuns are not ideal, we would rather live with the 'slight embarrassment' of this than comparatively more serious problems of 'buying rubbish' or overspending. This has its basis in the political message and is a consequence of previous public and political concerns about MOD spending and procurement. Our approach therefore is to use the bidding phase as much as possible to secure VFM and the design and delivery of a service that works, while minimising the PB negotiation phase. The bidding phase (OJEC - PB) is always over 50% of the duration of the OJEC - FC duration, while the negotiation phase (PB - FC) is always under 50%. We prefer actually, to use the time before OJEC and going to market to establish as much certainty as possible about the PFI project.

F) Time – Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

There is a general trend for the reduction in price drift over time. This is due to us becoming more prescriptive in what we want. There are now fewer surprises, and as a result of learning we have reduced the scope of the type of projects that we go down the PFI procurement route with e.g. IT. There was a deliberate strategy in the earlier projects to test the suitability of projects for PFI, but that is now well finished.
We have a standard contract and seek derivations on this.

G) Time – Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

While the calendar year as such did not influence the PB negotiations, the desire to get a minister's signature before they go away on holiday (or other such specific events) is often a driver for getting the deal done.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

Project complexity is a contributing factor, although the first two are not.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   Yes, though it comes down to risk allocation more than a change in scope. We would always look to explore change in the balance sheet and financials first before looking at changing physical scope. In fact the ration is around 80% to 20% (20% being change in physical scope). This comes back to the primary driver of having quality of product and service, over cost and time, so if a change in scope jeopardises that then other alternatives will be found.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   Yes, almost certainly related to the issue of scope and affordability mentioned above.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   There is a general cynicism in the MOD about private sector opportunism without any actual evidence. Our personal view is that we don't think the private sector are necessarily all sharks - they want to reach FC as much as we do. We believe that if they want to mess us around they will find a way to do it after FC - e.g. when we require changes.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   We have never actually used one. We don't think that a reserve bidder has any influence, as they have usually disbanded, but do support the idea of the influence of a fall back option - Somewhere as opposed Someone. This fallback option may be another procurement route or actually the 'do nothing' option - which is actually a powerful lever if the PB believes this is a realistic option.

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   Following on from 2 above, not closing the deal is always an option for us - if we are not happy with the deal we will not push it to FC - This has occurred on *a number of occasions. We are not as worried about our reputation as we are about signing a bad deal, and will not be railroaded into buying something we don't want. We realise that failing to close a deal will affect the PB's reputation in the market, and will compensate them if it is our fault. This compensation is a % of the bid cost but never the full amount. It does not adversely affect many of the particular private sector consortia's dealings with us in future projects - many of them will always keep coming back. I think that the MOD has a reputation in the market as not being afraid to do this (stop a deal before reaching FC) so go into these negotiations with their eyes open.*

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PUBLIC SECTOR INTERVIEW - John Neville - HM Prison Service 30th August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

Within delivery there are two sides; the procurement side which deals with the commercial contractual issues to do with the PFI and then there is our projects team that oversees the delivery of the project and also are responsible for the, once the contract has been signed, for overseeing the initial bid stage of the project. In terms of PFI delivery it is generally quite a small team that work on it within our organisation no more than half a dozen to a dozen would be involved on each project - delivering it- but obviously we would draw on experience both the Consultants and we would bring in consultancy support for: legal, financial, insurance and also to do with the building statutes. But also we draw on internal support as well which are things like we have our own construction unit ands they provide an internal view that helps with the operational assessment.

I suppose we tend to look at it more as a project, rather than just as a procurement, so that delegates that would come in and support the project or .. the operational support will be brought in to help assess/ do the evaluation of the project. So, if you like, the team is quite small but then there is lots of other bits that get bolted on so the team sort of grows a while ...on the key support we buy that in as well and that is all added to the project team. What we usually end up with on the procurement side you'd have the.. contractual/ commercial which is internal and that it would be supported by the insurance, the finance, the legal... the key advisors. And then on the project side they would tend to take forward the operational evaluation, the building evaluation, they'd have there own land and planning legal advisors as well. And also we would use... rather than there being project finance issues where there are .. Crown legal issues then we use the Treasury solicitor as well to provide advice on Crown issues. Just thinking about the teams.. we've had a great deal of continuity, for example, we've had the first 5 DCMF we had the same legal advisers, we had the same finance advisers for the last 3 projects, we've had the same insurance advisers for the 5 projects, we've had the same land and planning advisers/ people for the same five projects. Also there was very little movement with in our organisation as a whole apart from the .. operational advisers.

So we've had a lot of continuity and a lot organisational learning has probably occurred because of that.It's probably not been written down but what's happens is the people have done a lot of learning (through their participating in) a lot of competitions.

We have provided advice to other units on the PFI and we have done one or two other PFI projects , for example, in previous competitions we provided support to .. I think.. when the Scottish Prisons Service did their first (PFI) prison at Kilmarnock. But it is not a policy unit, it is a delivery unit. It's whole process is to deliver PFI projects.

We're not doing, in terms of volume, a lot of projects.In effect there have been 5 PFI prison projects which have delivered the 9 prisons.

GA: In terms of the information that is held with your organisation on PFI .. you say that it is not all written down but that it comes from personal experience.

JN: .. I'd say that it is personal learning that is then transferred into the contracts .. there isn't a PFI manual as such about how you would go about delivering a DCMF prison.

But the contract itself has developed as you have gone on.There has certainly been more risk transfer from the first DCMF to the last DCMS. There has been a *lot more attempts to pass the risk back to the contractor. ... That then got slightly complicated by, I don't know if you are aware of the accountancy rules that came in, about the need to see whether all things where on or off balance sheet.So that then also started to influence things as well; certainly in the last DCMS that had an influence.*

When we delivered DCMF 5 there was, although there had been a bigger team, in the final stages there was basically the head of unit - David Kent and myself on the commercial.

At the moment I'm just a contract manager. I mean today you could have put Commercial Adviser - which is more the role I had in the PFI project.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

I mean, this to a large extent hasn't been an issue for us because what we have always sought to do is be in a position to award the contract ... to have a smooth process from return of the contract to under take an evaluation.. to be in a position to get ministerial approval to award the contract. We've.. always been very adverse to attracting price drift and making sure that we've got the tender ..open so that they're open to acceptance for long enough period .. would allow us to undertake all the parts of work the we to undertake in order to get approval to sign off the contract. ... What we would be doing.. during the tendering phase is be doing work that would help us assess that so that we don't end up with a situation where .. we've got through that but we're not able to take them forward for whatever reason.. What we have always tried to do is get those issues sorted out before hand. What very much happened with DCMF 5 was that events that were generally outside our control .. which ..caused huge problems to the PFI market but also because of the fire at Yarls (?) Wood then caused very, very specific problems with the Custodian Services market.
Those were project specific issues that arose that you could not have foreseen or could not have been dealt with at the tender stage.

GA: Okay. ... There were three events that caused problems; one was the insurance market related to the 9/11 bombings; the second was the fire at Yarl's Wood Immigration Centre - I'm not sure how that effected things but ...; not sure of the third one actually.. I think it was just general inflation through Modular construction. In other words, the deal was signed with Modular construction company and that was on the assumption that the preferred bidder phase or construction was going to happen at a certain date. But because of the other two (factors) it didn't so they then had to revise there price.
JN: What I'd say is that those (first(two actually contributed to the third. There were three issues; you've touched on the first which is what happened with 9/11 and the problems with actually getting terrorism cover. The fire at Yarl's Wood - because the insurance market saw it as similar type.. their view was that we've providing a Custodial Service therefore they'll be the same insurance issues. As soon as there is an incident it tends to make insurance a lot more expensive. And also some providers then think ' well why should we actually provide it' and even before those two events here were general problems with the insurance market - general .. issue to do with insurers not ..making the profits they usually do or expected. ..(insurers) were having to pay out more then they normally would do. There was general inflation price increases in the insurance market because of general issues that were happening within them. ....(recap) This meant that insurance was unavailable and the impact of that delay was that fact that we then couldn't get the contractor to start work when they wanted to and therefore the construction.. ..They book slots with these modular cell makers and.. their costs increased in

the year that there was a delay and you also have to book and reserve spaces with them. So we were also paying for the time these contractors had previously booked with the cell makers. ... It was really around the Events to do with insurance.

So it was the renegotiation around insurance that caused the delay, brought on by the three events I previously described, there was some lift in their operational costs as well but I think the man costs were to do with the inflation on their build costs.

What we do when come in we expect those prices to remain firm for 270 days. So there is a 270 firm price from date of return.. 9 months in effect.

Obviously that was exceeded in DCMF 5.I think that they came back in about (the) 1st March 2001 and although I think we were able to extend it once by another couple of months. The contractor then said .. this is getting ridiculous we're holding place prices that are more than year old and we signed Ashford in 20th December 2002 so it gives you some idea ...and Peterborough was 2003. This gives you some idea of the delays.

If we've got their price and we agree the contract with 270 days then apart from reference (agreeing the interest rate, which may affect the price slightly up or down) then apart from that the price that we pay for construction would be fixed. So, (for example) if they bid and said cost of building was £20million and they quoted an interest rate of 6.5% - which is there cost of finance. Then when we came to sign contract within the 270 days and it was 6.5% then we would pay that price of £20 million and that price would be fixed. Within the contract there is no inflationary indexation mechanism for construction costs we are merely paying a fixed price for that based on the agreed interest rates. Within the 270 days. What happens after the 270 days has expired and you go to renegotiate the rate that is used what actually happened? ...

There were no indices about how price movement would be dealt with after the 270 days had expired .Our approach has been while if you put indices in then you are implying that after the 270 days that you will automatically give an increase, whereas we would rely a bit on commercial pressure. (For example,) we 're a week away from signing it, are you really going to increase your price. We'd ... look to use commercial pressure/ general commercial pressures within the bid.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
    a) Knowledge held in the organisation
    b) On the way you access expertise from others?

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   I think when there is a need... PWC used to run some courses to do with PFI and we invested in those. But I think because there has been the stability of

staff it has very much been passed down from word of mouth – almost farther to son type approach. Learning on the job type training with staff that would have been involved in DCMF 1 being involved in DCMF 2 and 3 and if there were new people then they would have got them involved and trained up. So it is internal expertise supplemented via advisors that you have a relationship with. Basically our advisors .... When I said PWC they ran some specific courses for people to attend so you learn about ...they may be advisors but it was not in their capacity as advisors that they ran the courses.. it was a separate thing.
We'd also use our advisors to ..pass on knowledge.

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   I'm sure it does. because you are familiar with people then I think that we knew what the boundaries were and we were just tinkering at the edges. There is an organisational familiarity combined with potential for some of the same people to be involved and if that was the case then there is the potential for some benefits to that. Sometimes some disadvantages too. Sometimes their tends to be history between some individuals and if individuals don't get on ..so. I think there are advantages to it.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   Maybe prior to DCMF 5 there was a feeling that the relationship has changed .. there was a feeling that once they got to preferred bidder they almost have the contract in their grasp so there was almost commercial pressure on them to agree to changes or to be conciliatory... I'm not talking about big things it may just be some of the details around the contracts (for example) where specific meanings may only be called on in exceptional circumstances. There was a feeling that the contractors were very unwilling to make changes that if there had been some commercial pressure where you could say 'well they're making the change why aren't you' sort of thing that you could take forward. But I don't think there was, the minute they've got preferred supplier there was... I don't think there was a huge .. I don't know whether it was, on their behalf, a thought out change. Maybe they just thought they would negotiate tough.
   It could just have been that but from our point of view we didn't have the levers or the commercial ... we wanted to be able to drive through these changes and obviously the way we had to do it was to use the commercial pressures that we could bring to bear on them.

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?

- if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

   Their main influence tended to be felt around the contract negotiation rather then the build or the operation; their concerns were about eth contract that is being signed up to and making sure that they were comfortable and (it) depended on the bidder. Some bidders are far more .. had their financier present at negotiation meetings .. they were always mentioned and always around.
   Because of the approach we adopted ... because there were significant changes we started this process off right from - DCMF 5 was a two stage competition so right from the start of DCMF 5 we were telling bidders what we were looking for ... On of the things that .. happened on DCMF 5 was that we don't for the funders, if the project failed during construction we don't pay any termination costs. We tried to apply that for the operational phase prison to say that if this contract got cancelled then we don't guarantee to pay any termination costs and it would be down to you to find a new provider to start the service. That was certainly unacceptable to all of the funders. I think we already knew that and we were just testing how far we could go with the market in terms of pushing back termination costs to the contractor (and) to the funder but hat was known about at such an early stage that it wasn't .. by the time we issued the ITT and the draft contract in that we knew that it wasn't going to be acceptable was it wasn't written up into the contract. We tested the market in the first phase of the competition and that was one of the areas where something was totally unacceptable if we had pursued that then obviously that would have been a deal breaker in terms of the contract. But I think that we probably knew that ourselves but it was just a way of testing how far we could push the termination costs back onto the funders and to see what they were prepared to sign up to.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   Given the project cost over 25 years I'd say it was less then 1%. up until financial close? So what I'd be taking is the total net present value of the project of the 25 years.
   Sometimes this is as much as 240 million down to the low end.. it's less then 1% of that.
   I think on some of the competitions they were starting to think that we were spending quite a lot of money after the preferred bidder but that was to do with the fact that.. although there was a mark up on the contract.. there weren't many commercial negotiations. On DCMF 5 because there were some radical changes to the terms and conditions, and some of them were very technical, that there was far more negotiation before hand about what the authority .. what we were seeking in terms of to change the contract so in effect ... in order to get the bidder to become comfortable with it in effect we may have been negotiating with three or four of the firms.
   Also I think that on some of the previous competitions it had been very difficult to finalise contract and keep pressure on the contractor to agree changes once they were in a preferred bidder situation. Where it was felt that if we were still negotiating with all four there was still that pressure that they were still in a bidding process. Once you got past preferred bidder stage there was a feeling that the contractor thought .. 'well we've won it so we can be a bit'.. more reluctant to agree concessions that the authority may have been seeking.

I know it's not price drift but it is certainly .. on the legal side there was an awful lot of work done getting then to submit comments on the contract during the bidding process so that when they submitted there final bid we knew which ones were willing to sign up to the contract that we wanted to sign and which ones were proposing changes to it.
The commercial pressure was seen as very important to drive through these changes.
Just whilst we are on preferred supplier, I don't know whether you picked up on Peterborough was that although it was to do with closeness of the bids it was actually the first time tat we had actually taken the these forms forward for preferred supplier.
That was something we were keen to push as it was seen that because we has just single preferred supplier that when the bid was announced it was seen that they're won the contract therefore we don't have to be flexible in our negotiations and we were very keen to keep the commercial pressure on them for as long as possible and so taking two forward for that was all part of the strategy. For Bromfield because of the various bids that came in that just wasn't a feasible – there was one bid that was clearly much better than the others so there was justification for only taking one forward.
DCMF 5 was the first time had done that, prior to that it was just one firm was announced as preferred supplier and that was taken through to financial close.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

    Not really. The main thing is to get from preferred bidder to financial close as soon as possible. Sometimes going through from preferred bidder to final close is a bit like how long is a piece of string.
    There is a line of thinking in the private sector that the longer you spend at preferred bidder and the construction guys are sat twiddling the thumbs that they'll find anything, digging deeper and deeper into the detail. I think that the strategy of having a quick preferred bidder phase is conducive to keeping price creep down.This was part of the reason why, on DCMF 5, we did some of the negotiations on the contract .. the idea was to reduce the amount of negotiations that took place after ... it leads to a speedier resolution.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
    -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Were the use of BAFO or FITN extended clarifications influential?

    We're tending to front load the negotiation before preferred bidder as the strategic direct. The decision was take by David Kent at the end of DCMF 4, although it wasn't written down I think he wanted to avoid a situation where I'm negotiating for hours on end when I have no pressure to bear on the them (preferred supplier).

F) Time – Historical

1. Have you had involvement in multiple projects?

- if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   I don't think I am able to comment- DCMF 5 was a one off. Also, (related to DCMF 5) it is a length of time payment (rather than simple price drift). What we're paying for is just delays on that.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

   None.. What tends to be the main driver tends to be when the prison places are required, so we work back from that. If the places are wanted in May 2009 so we'd work back; it will take 18 months to build the prison, 12 months for competition .. whatever. It would be more the big driver is when the place is required and we'll have got the funding to start from that particular point in time. But we are not driven by any fiscal dates.
   There are future projections – we're not doing any DCMF now.. about how the prison population will or won't grow depending on a number of factors. In the past there have been points when the prison population will exceed the known capacity by X date – given long term trends. So time has always been important in that respect and an important decision in when or whether new prisons are built ..
   I'd say that that wouldn't then be driven by the time goal. Because there is only a finite amount of money/finite cost. We do need to be sure of the quality o the regime.Which comes back to the emphasis places on the bidding phase and getting everything right even if it takes a little extra time to do that.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   Because it is only one then I think the answer to all of that is No.
   The only influencing factor, which was to do with these modular builds, was what other builds they had on and how busy they were. I don't thinks that sits within (this question).
   GA: So effectively, in terms of over all complexity prisons are not as complex as a, for example, a hospital.
   There is guidance available to them on how they can do that plus a lot of the architects have previously worked on prison designs - architects employed by the contractors. They previously worked on prison designs when they were dealt with by organisations like the PFO or when the Prisons Service was commissioning them direct. So there is no inherent complexity in the design in terms of systems, for example, medical equipment in hospitals.
   I think that once people understand that it is a prison and what the basic requirements are I don't think that there is anything inherently complex about them.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   No, not as far as I am aware. ... use a public sector comparators so they obviously have to be under that and in terms of us funding it, it was within the funding we had.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

   No.

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   Yes there was; because on (DCMF5 5) this was specific insurance problem then there was a substantial renegotiation of the insurance provisions within the contract and what it resulted in was - if the price increased ... we agreed a base price for the cost of insurance if that cost increased by ...5-10 % then a cost sharing mechanism kicked in where the authority had to contribute to the additional cost of that insurance. But similarly if the cost of insurance reduced the authority was able to benefit from some of the reduction in insurance costs. And that was the main risk change that occurred, which is all linked back to the original problem rather then it being an opportunity for further negotiation on different issues.
   So there was a reassessment of the risk based on the what happened...
   In effect the contractors got scared...prior to that insurance was seem as a solely contractor risk and now ... it is a shared risk.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   No

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   I think what has been the practice is to nominate the preferred bidder but then not to tell anyone else that there bid has been disqualified then their bids would so we couldn't go ahead with the preferred bidder .. but I don't think we've actually said to somebody you are the reserve bidder, it has been more.. Unless there bid was considered unacceptable or undeliverable ... we would have delayed saying that the bid was unacceptable but may have said that another form was being taken forward and you are not preferred *bidder. I don't think that that rules out the opportunity to come back and announce them as a new preferred bidder in the future.*

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   Catastrophic is too strong a word.. but I think that .. One of the things that we have always regarded as a success is that ..we have been fairly successful in moving forward with a project and actually getting a contract signed. So I think that if it happened that for whatever reason we couldn't agree a contact I think it would do lot of harm to our reputation because I think that we have got ..I'd like to think that we have, as an organisation, a reputation that does take PFI seriously and is able to get PFI to deliver a valuable service. If there was DCMF 6 and it didn't go ahead then I think it would be the last PFI prison that was ever done because I think that the contractor wouldn't have any faith in it and senior people who look to PFI as a way of delivery thing would then lose faith with it as a means to deliver services. Pretty major. We've got the political background that in the late 90's or 97 – there was talk of the incoming Labour government were never going to do another PFI prison so it is not a procurement route that sits well with everybody in the public.. I don't think that it would then be.. PRI would then force the issue with ministers to say 'Why are you going down this route/ why are you involving the private sector' they can't negotiate that so I think that it would be very .. death of it.

   From our pint of view we have a requirement for these places and we know what we think they can cost. I know there have only been 5 but there have been 9 prisons delivered (repeat) so we can deliver them.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PUBLIC SECTOR INTERVIEW - Andy Forsyth - West Sussex CC (Crawley Schools PFI)
1st August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

   I joined West Sussex, or was recruited by West Sussex to be the project manager for the Crawley Schools PFI which started in August 2001. I picked it up pre OBC stage, so the first job was to bid for PFI credits. So we wrote the OBC and took the project forward from there - right through to Financial close. So I was involved up until the operational phase. I had not had any previous PFI experience before the Crawley Schools project, but following it I moved onto a PPP with the social care services, which I picked up post PB and took through to financial close also.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   The main difficulties that Local Authorities have with PFI is the lack of experience. This (the Crawley Schools Project) was the first PFI project the authority had done, so we had to rely quite heavily on consultants - technical, financial and legal, in order to help us and point us in the right direction. Other organisations that were helpful with 'free advice' was the 4Ps. They were excellent in providing advice on running network meetings and so forth. They bring together a variety of people from different authorities together to swap stories, which is very useful. We were doing this at a time when the 4Ps had not done very much work on Standardised documents - which they done a lot of work on standardised documents since, which I think is going to help a lot of people. e.g. While I started not knowing what an OBC looked like, you can now download a standard OBC from the 4Ps website. Obviously it has got to change to fit your project and organisation, but you have a framework that is going to be extremely helpful for people down the road. They are sector specific. So getting all the documents together is a huge task - the administration load. The second challenge is keeping stakeholders informed of what is going on. A lot of people don't like PFI, and while we're not here to convince them that this is the right road to go down, we are the only show in town so we had to have a lot of meetings to explain what we were doing, how we were doing it and how PFI was going to be good for them. We visited other operating PFI schools with them (councillors) to show them how things were running.
   The part of the procurement process leading up to the selection of PB was very intensive. The OBC was approved by the project review group of the department of education in March 2002, consequently the OJEC went out the same month. We selected our PB March 2003. So it took 12 months, including a BAFO, which is fairly good going. That process was driven by a project specific driver - the change of the 11 year old year group from primary to secondary schooling to bring them into line with the rest of the schools in the LA. This meant the building of a new secondary school to accommodate the double intake and increased numbers. The date of transfer had been set in stone as August 2004. So this was extremely helpful as a primary driver.

We had 4 secondary schools as part of the PFI at the start, which dropped down to 3 secondary schools prior to the ITN documents being released. We also had two 2 SEN schools which were being built already which would have been included in the servicing element of the deal, but they decided they did not want the private sector running their SEN education. The bottom line for education PFIs is that it is the governors that make the decision, and if the governors say they don't want PFI, then there is not much the LEA can do about it. The LEA can't force their hand.

Having selected the PB, it was an entirely different phase, working on the legal documentation primarily which took a long, long time. The PB stage was 9 months - three quarters the time taken from OJEC - PB. And the reason for this comparatively long time was lawyers, which I don't mean nastily, but the standard documentation was not available from the 4Ps at that stage, so we had to write a bespoke contract with our legal advisors. The other thing we should have done before getting to PB was have a much much clearer specification. In terms of down to room data sheets. It was a big mistake not having room data sheets produced prior to PB, firstly because it is very time consuming to do them, and secondly it would have been . 4Ps advised us not to do them as they would stifle innovation - I agree in principle. However, when you have three building companies involved, they want to know every detail because they are going to price it up. If you say I want 10 data points in each room, or I want 2, or 200, that's going to make a difference in their price. Until the room data sheets are sorted out, you are not actually comparing like for like. And that brings us on to the basis of your thesis and that is price creep. So if you haven't done that before you select the preferred bidder, you are more open to price creep. And when you do say I want 20 data points in each room, the PB will say 'I have only priced for 2, so if you want 18 more you will have to pay for them'.

GA: so what it becomes is a scope issue, because what you are doing by not having the detail early, is creating the opportunity for scope to change at PB.

AF: If you look at it from their point of view, there are three in the race, it's a £65m contract, and each wants to win it. A the bidding costs are between £0.5 – 1m. You are talking a large investment, and they can't afford to loose too many – One bidder said to me that we need to win every 2.7 we bid for to stay in PFI, I don't know how true this is. If you are prescriptive in the ITN documentation, you will get closer and more like for like pricing, but are stifling innovation and associated potential VFM.

The price creep that did occur on the Crawley schools, was largely due to the spec changing. And there were a number of factors related to this:

to don't have a decent spec to start with e.g. you haven't said you need 20 data points in each room…they have assumed 2 in their pricing. E.g. They come back and say they are going to use Ash trees instead of the specified Ewe trees, because the planning officer will not allow any more ewe trees – you are in a corner so the price increases to pay more for the more expensive Ash trees. So its those sorts of things that as you are tightening down the specification more and more, some things come your way and some of the stuff they can pay for themselves. E.g. AV sockets: we specified that we wanted 1 in each room, and they had priced for 1 in each room but hadn't priced for wiring them. So we said we had made the assumption that you were wiring them, and they said that the wiring was part of the separate IT contract so it wasn't part of the PFI. They ended up paying for it. But that's an example of once they are PB they will argue the toss on everything – they will try it on but at the end of the day they are usually reasonable. The output specification idea is great in theory but not so good in practice. We did not go for the cheapest bidder, we weighted our evaluation so that design issues became important.

We employed an architectural advisor – Colin Stansfield Smith, semi retired, and he was very demanding on both us and the bidders in terms of architectural quality and related VFM.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   Because we were a first time client, you could be harsh and say that the consultants saw us coming. We undertook an interview process for all out consultants so they were in competition to get the consultant job. We did need them because they had been there before and they had the experience that we didn't. The documentation is extremely complicated, particularly on the legal side. The financial models that need to be drawn up, I think that even now we do not have the capacity to do them in house. They are specialised bits of kit and you need people to run them that understand what's behind the figures. I think we hauled all three of the consultants (design, legal and financial) over the coals for a variety of things at certain points in the process. We said we were not happy with certain ways they were doing business, and they consequently changed the way they did those things and gave us a better service as a result. I think with the standardised documents that are coming out I think you could really tighten up on the spec that you give the legal consultants. E.g. we could say to them ' we are not going to pay you to change wording of what force majure means, but we will pay you to ensure you that we don't run contrary to any EU rules regarding one of the EU based bidders' In saying that they have got to ensure that you have a watertight contract that will last for 30 years, and that is no mean feat. I think now, with so much experience under the belt and with so many authorities having done this you should be able to really tighten down on them and say look I'm going to take that, that and that as standard, you're not going to change the wording but please make sure you have got it right for us in the non standard areas. I think that the legal firms understand that.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   We have written a 'lessons learnt' report, and hope that the people that were part of the project team are available for the next project. But in saying that you can't rely on this as staff tend to move around. So I have not experienced the situation where the project team stayed together from one project to the next.
   What we have done is set up a major projects team, which is trying to provide a framework for all project management across the authority - not just PFI. That team is drawing up some very good documents on project management processes to be followed. So we are making a conscious effort to keep the project management skills in house. But as we haven't got another PFI at the moment then the PFI specific skills are wasting.

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   We had a couple of project management days for the project management team, which was done internally and an attempt to do teambuilding and *getting people to understand what we were trying to achieve. This was led by internal training organisations. There were a couple of conferences that ran in other schools, where they talked about their PFI experiences. There was the 4Ps which ran network meetings which I and another colleague attended. We also did a days financial awareness training with KPMG, and we got our lawyers to come in and give us training on the negotiation phase.*

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   The relationship between us was good. We both understood where the other was coming from, and we were both hard nosed. They on a couple of occasions said to us they did not think it was going to be that difficult (slightly tongue in cheek) and we were glad that they perceived that.
   There were also some stand up rows, mainly over price creep frankly. Then when we sorted out the spec and virtually got the price sorted out there were certainly some challenging conversations between the lawyers. There were three groups of lawyers (the banks also have lawyers) who each have their own agendas. It was a very frustrating time, but there was never any 'fiticuffs', and every now and again both sides requested that their respective directors get in the room together and have a chat. We called these Principals meetings or PAI. If necessary we got the 'big boys' together to have a chat and if necessary do a deal. There was no change in project staff during the negotiation phase.
   There were occasions when we put our foot down firmly and said 'we are not going to pay that', and there were a few times where they said 'well if you want to transfer the risk to us this is the premium for doing so' – as I said we were both suitably hard nosed, but we did not fall out over it. There was more intransigence between the lawyers – they would argue over what was a market norm – given the supposed standardisation in the industry now, nobody could agree what the standard was.

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

   The bank put them through a really hard time actually. It's a mistake that is made time and time again, and that's the financier's lawyers are not brought in until too late – I have heard this many times (from other projects). In my opinion the banker's lawyers should be there from the outset, but the provider *does not want to do this because it costs them money. So you agree with the bidder, and then the bank comes in and doesn't agree, so you go through the same process all over again. You have to balance the cost of having the banker's lawyers in early against the overall cost of the project - I don't know. But it certainly lengthens proceedings, in which time the building prices go up. In the last few weeks of negotiation we sat on the sidelines while the bank and the provider were locking horns.*

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   I haven't got that figure to hand, but I know what they put aside was not enough.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - if yes, please elaborate...

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   It makes building prices go up. If you take a long time over it, then the price you have decided in January to build the thing will not be the price you have to pay in December. These are inflation effects.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   The price is sort of fixed. We wrote a PB letter, stating that you agree to go forward based on pricing model 12 (for example). And this is a basis for change - things will change in that model - you will do optimisations on that model and decide that want to change the spec. Your financial advisors make every attempt to optimised the financial model and at financial close you time it so that the interest rates are going the right way - the dreaded SWAP which is dependant on the money market at the particular time. Having fought for many hours over the previous 9 months (for such things as trying to ensure that wiring had been included, and that changes that had been made cost £30K not £130K which is the figure the PB first put up) all huge sums of money to me and we saved the CC £100k. However a quarter % of the interest rates had a £500k effect on the price - which was very depressing.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? - Were the use of BAFO or FITN extended clarifications influential?

   The more you can tie down before you go to PB the better. The closer the spec is the less price creep you are likely to have.

F) Time - Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   Can't really comment

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   The ability for LA's to go down alternative borrowing routes. So instead of having the bank involved funding the provider, the LA can borrow money to fund the provider - and that's what we did in the second project. It was not available to us in the Crawley Schools project as it closed in January 2004, before the LA's were given much wider powers to borrow money (which came in at the end of 2004). Having this option for the Crawley schools PFI would have meant less time in the negotiation period because the negotiations would have been between two parties, not three. Whether this would have directly affected price, I don't know, but we would hope it does because it would make it cheaper for us.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

   I think that that is probably true. For us we closed in January and while were aware of financial years and such, we were not going to let it be a driving factor.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   No I don't think it was really an issue - I think the percentages would be the same no matter what the project size. I don't think complexity was an issue either.
   We did not have any retained estate, or refurbishment work as part of the scope.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   Affordability is very useful - it's a stick to beat them with. The LA will say 'look we are going to have to dip into our pockets by x amount in order to fund this project and the councillors have signed up to that. If you are going to ask us

to did deeper, then we are going to have to go back and ask for extra money and we might not achieve it, and then say we have gone back to ask for the money and they have said no - so it can be a useful stick. And we did use this, but whether it had any effect I don't know.
We never got to the stage where we had to change the spec because of affordability - we managed to keep the creep down below a manageable level. Also we didn't have to go formally back to the members to ask for more cash, although we said we had to the PB and we did go back informally. They (the PB) will try and cut their cloth differently, and there is a number of different mechanisms (interest rates, transfer risk) for changing funding.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   A risk matrix went out at the OBC stage, and we generally stuck to that. We did notice that some bidders had changed the risk matrix, which affected their ITN price and was taken into account. At the ITN stage the LA refused to undertake site investigations, so the bidders put in a premium for site investigation risk. But at the PB stage there was no specific reallocation of risk.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   We didn't go back or threaten to go back to the reserve bidder.
   I think we worked up a pretty good relationship with HBG during the negotiation phase, it wasn't plain sailing and we had some real humdingers. But they never threatened us (with stopping negotiations) and they wanted the job for the best price as they could possibly get. We did not notice any obvious opportunistic behaviour.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   Reputation: No, we were not really worried about reputation - we wanted the schools, they wanted to build the schools and we wanted to negotiate the best price for them and reputation did not come into it.
   If they were giving in because they were scared of getting a bad reputation is was not visible.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

> *If there is one way to save money in PFI is for the LA's to work together. Work up the standard documents and try and produce as much of a specification as is possible. If they private sector know what they are going to get then they will approach it with more confidence and will price accordingly.*

Finally, thank you for sharing your valuable time, knowledge and experience today.

PUBLIC SECTOR INTERVIEW - Mike Inman – Stoke on Trent City Council 11th Aug 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

    I'm head of premises and client services in the education department, and at the time we started negotiations on our PFI contract, and indeed until contract close and thereafter I acted as project director for the Stoke on Trent Grouped Schools project. My immediate line manager is the director of education, who came in at certain critical points during the negotiations and headed up what we called the PFI monitoring group. This was a council group who we reported to and got decisions out of - it was a decision making body. They had a strategic overview from a council perspective and were mandated by the city council to take decisions. This group was not involved with the actual negotiations which were done by a small group of people who were either led by the director if it was a fundamental issue, or indeed myself if it was more routine. It meant negotiating both here and sometimes in London, and also in Nottingham which was where the lawyers were based. The director and myself used to meet nightly to agree strategy between us.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

    At the time we were starting out, which was 1998, there was very little experience in the PFI world and particularly in education - I think only 2 schemes were a signature at that point and both of them were single school schemes.
    Our scheme, in comparison was a whole estate involving 125 schools, and we were granted pathfinder status simply on the basis of this. It was a deliberate attempt to find out a) if it would work and what the issues were to manage a large scale scheme, and b) if there were any economies of scale. So our project was effectively one of the first batched schemes - there were 5 key batched group projects running around the same time which were called the pathfinders for large grouped schemes and we were the biggest by far. Because there were no standardised terms around and a lot of the issues about voluntary aided schools and so on were just not understood at the time, it took us a long time to reach contractual close - it took nearly three years. So nowadays procurement takes around 18 months or less on average, but for those first schemes because we were groundbreaking the rules, and working it out as we went, it took a long time to get to financial close (FC).
    In regard to price drift, there was one key point which was the artificial date of 31st March where both the interest rate and support rate were both set, and both of those changed on midnight of March 31st. Until recently, and I think they may have changed it now, there was always a scramble to try and get contracts signed by this date. For another reason, we just missed that date, and that caused a major financial problem for us, which took a further 6 months for us to resolve, and we finally reached FC in October. This financial problem arose because both factors went against us, and the in the scale of our project it was 7 million pounds, which was a lot of money. I think they have altered this now, and this March 31st is no longer a critical date. They altered this because I think the government realised that there was an unholy

scramble to do the deal before the March 31st deadline and that it was resulting in both sides being under pressure and not doing good deals as a result - sometimes you make mistakes in these situations. But it is only recently that has changed, so for the ten years prior to that the March 31st date was critical. The bigger the project was the bigger the potential problem, especially if both rates were going against you. One may go in your favour and therefore may neutralise the effect of the other one that is working against you, but in our case the interest rate in the market was going up, and the scaling factor was coming down - so it went against us increasing our costs by 7 million. The effect of that was we had to go back to government and ask for more money - so that is price drift but it is nothing to do with the contractor's price, but all to do with the price of support if you like - government funding.

The lesson we learnt, but also we tried to mitigate this, was to say to the bidders, both at ITN and BAFO stages, that we were not going to progress to the next stage until we had more certainty in terms of what we were getting i.e. what the price was. Because tenders when they come in often leave some areas pretty vague - they may say 'to be advised' or 'provisional sums' or 'we have excluded this at the moment from our price' - a whole range of caveats. Now that's no good when you are trying to get to a negotiated price, and you have got to get that resolved. Now the best way to resolve that is to keep competition going for as long as you can, for once you have gone to preferred partner there is a tendency for price promptly to go up - because of those exclusions, provisional sums and caveats, or indeed changes in scope (which is on your side rather than their side to determine). So what we tried to say was 'we are not going to go beyond a certain point before you have clarified your bids, and you have put your figures in here, and you have removed a provisional sum and you have put an actual figure which you are prepared to take a risk on. So there was a lot of discussion with our bidders around ITN stage and BAFO stage to get to a point where we were comfortable that the price was a proper price, and wasn't going to creep upwards in a large way once we had announced preferred partner.
But having said that, that's the ideal scenario, and you do what you can in those circumstances. So having announced preferred partner, a lot of other things then come out - especially when you are talking about contract clauses and definitions, and exactly what you are signing up to. It's not so much the price that then changes, as when you define a contract clause and you try and rewrite it in a way that is favourable to the council, and the preferred partner will say 'hold on, we didn't take it that way and we have priced it on another basis, and if you want it that way then the price alters'. The particular issue for us was the vandalism risk, which we wanted to pass onto the private sector in total. They said that they had only priced for vandalism risk out of school hours and not internal vandalism risk (pupils themselves while occupying the school). We had a debate about this and came to the conclusion that the best way to deal with it is to share the risk - we took the vandalism in occupied time, and the provider took vandalism outside of occupied time. This was done because otherwise the price would have increased. You have to say, we are on the cusp of affordability and if we make the thing more expensive we can't afford it, so is the best thing for the council to retain some of the risks. Because if the risk is passed they are going to take a judgement about that and they are going to put a figure on it, and they are also going to price for their risk, which is what PFI is about. And it may be that it is not VFM to pass the risk anyhow. So in a lot of minutae things you have these debates. But I would have to be honest and say there was some price drift between PB and contract close, and the only way we could deal with it, because we were at the cusp of our affordability, both with the government and with ours. We couldn't raid any other school balances in the authority because all the schools were in this, where as other authorities could do this if they were only doing say 12 schools. From our perspective then, when the price crept up a little bit, they only way we could get back to something we could afford was to negotiate some marginal differences in the scope of the project. e.g. we pulled internal decoration out of the project – that would

have to become an issue for each of the individual schools, but kept external decoration (including window cleaning) in on a five yearly cycle. We wanted our schools to look good from a city point of view. There was political motive in this in terms of selling the PFI to the general public. Similarly, we wanted the PFI provider to provide the schools available to community use up until 10pm at night 200 day per year free of charge to the school. There was a significant price to this in terms of energy costs and so on, but in talking to our schools this was something that they put very high on their agenda - to extend the schools and make them community based. So if we wanted that as part of the price other things we could not have. So indeed between PB and FC a lot of these issues were teased out. So this priority list was based on our discussions with our stakeholders. When you are in negotiation you can't have everything, so you have to weigh up the prices and the risks, and in some cases we share the risks and in other cases we said 'look you provide that, but we realise there is a cost to its, therefore something else has to come out'.

The standard PFI risks that we put out in our original tender documents were all there - all the usual things such as planning delay, design, build etc. So there was no fundamental alteration of the key risks which would have affected the balance sheet treatment of the PFI scheme. What there was instead was a reassessment of risk around scope - such as the vandalism example.

The key thing for local authorities and indeed anyone negotiating PFI schemes is to understand the issues from day one, and to try and look ahead at all the implications. PFI is a 25 - 30 year contract, which none of us have had much experience of entering into and none of us are going to see it through. So you have to try and think 10 years ahead and 'what will we require then?' I'll use the example of extended schools - at the time we choose to make them an important part of the scheme they were not really heard of and they were not even in the government's vocabulary. But we took a view in the city here that this was where we needed to go in 10-15 years time and tried to build provision for that into the project. Similarly, because we were going across the whole city with all the schools, we had to try and estimate the future demand for schools - both demographic and curriculum changes and how that would affect where schools were needed and how they were designed. So how do we deal with the whole process of change, and that was the hardest part of our thinking and negotiation because there was nothing coming out from government about this at the time. So we did some radical workshops with our advisors and the PFI providers to say 'how do we deal with change?' Since the biggest part of the principal agreement are the clauses relating to change, so this emphasis could have assisted in the negotiations at PB. But the point is you have to think ahead, and this is to do with risks and changes - the risk pattern might change in 10 years but who really knows?

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   We acquire PFI knowledge primarily by doing it. I came to this job in 1997, not knowing much about premises, but I had done a lot on the client side having been in teaching for 23 years. So I understood schools but knew very little about buildings. So the point I make now when speaking to other authorities about PFI is don't be frightened about it - there is now a lot of knowledge out there and a lot of other authorities that have gone through this route so use them. But there was none of this available for us at the time, except the five

LEAs that were part of the pathfinder group used to meet in London once a month with the DFES, and we used to share experiences. So we had central support, but there wasn't knowledge anywhere else, there wasn't standardised terms. The standardised terms came about largely as a result of our working group. It was a learning process, and we have since been involved in the dissemination of that knowledge gained to other LEAs, by giving talks and receiving visits. We have also been involved with the 4Ps, who gave us support.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   I have a small team here of four people who manage and monitor the PFI contract in operation for the council. They are highly skilled people, but they need to keep up to date so they go on regular, usually yearly, training.

4. What reliance do you place upon your public sector advisors - does this change from project to project, or has it changed through time? Public sector only

   We had three key sets of advisors. We had financial advisors who were a small company called APOS, who comprise about 20 people who have formed themselves into a niche market - I think they were a break away group from PWC originally and they specialise in PFI financial advice in housing, education and transport. They worked on the Channel Tunnel rail link originally, so were very experienced.
   Our legal people were Eversheds, who were also very experienced and had a reputation in the market.
   Our technical advisors were Gleeds Management Services for condition surveys and the Building Research Establishment (BRE) when were trying to look what the future held for M&E systems.

5. Has your organisation worked with the same private sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your private sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   At the outset, one of the key things for us is that this is not a normal contracting relationship - it's got to be on the basis of a strong partnership. So when we were selecting our bidders at the various stages through to contract signature, one of the things very much in our mind was 'can we work with this outfit?, can we trust them?, can we work in partnership with them?, will they work in partnership with schools, governors and staff?' Their ability to absolutely rely on the contract but to work properly in partnership and to have knowledge of and an understanding of the educational aspects of what we are about.

Because this is not just a straight buildings issue, its about delivering education and raising standards. So that is key. The advantage of PFI negotiations is that you get to know people quite well, unlike a straight tender where they come in and you assess them without actually getting to meet them and understand them and they don't get to understand you. You get a reasonable amount of time to get comfortable with each other, and they are assessing us as much as we are assessing them. From our side, we can get a view as to whether we think this company is genuine - because sometimes when they are doing presentations it is slick and professional, which is fine, but what's beneath it? - that's what you have to get down to. Can you trust them, to put it bluntly, and can you work with them? So the PFI process, and particularly between Preferred partner and contract signature we insisted that we met in the negotiating team on their side some of the people that would be delivering the project. That's important, because sometimes the people that are negotiating with you move on to other negotiations once the deal is closed. The point I'm making is, that during PP and contract signature while you can have disagreements and heated debates about clauses, that doesn't matter if you feel you can trust the people and you feel that they are not spinning you a line. They accept that they have their position and we have our position and we have to meet somewhere in the middle, that's what negotiations are about. We had strong talking, but it was on a professional, trust and open book basis - from both our sides. Unless this is the case, you will run into difficulties, and a number of schools PFI contracts have run into difficulties because the relationship has broken down.

2. Did the quality of the relationship influence any movement in price during the preferred bidder negotiation phase?
   - if yes, please elaborate...

3. What influence did the financier have on:
   a) Your relationship with your private sector partner ?
   b) Any changes in price during the preferred bidder negotiation stage?

   The key thing for us, is that before we announced PP, we did ask the banks and the equity people to agree to certain key terms before we moved on. e.g. there was a danger that having finished 124 (out of 125) schools the provider may run out of money and decide to take the financial hit and not do the 125th school. That's not acceptable to us or to that school which signed up in good faith. So we insisted in a clause going in which said that if any one of the schools was failed to be cap exed or did not meet the output spec, provided we gave enough notice for the provider to do it, then we could terminate the contract. Now this was a big risk item and due diligence issue for the banks, therefore before we announced PP we said to them that it was so important to us that we required them to sign up to it before we moved to PP. So my advice to other LEAs is don't go to PP too quickly - make sure you have agreed certain key things first, so these are not reopened at a later stage which causes potential delay and price creep. So you need to know what the bank's key issues are and address them at this stage. This way you can keep the gap between PP and FC tight and short.
   While in education PFI projects with fewer schools the start of the academic year might be a driver on time, with the batched nature of this project it was not an issue. We needed to get started, but the fact that the contract signature drifted from March 31st to October meant we were only a term behind in starting construction, and although the first schools in the batch were handed over later, the provider started on the rest earlier than originally programmed and they were delivered on time. So it ended up as a capital period of 4.5 years rather than 5 years.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were procurement costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   The NPV for the whole scheme was 153m at contract signature, of which about 100m is capital and the rest FM. It cost us about 1.8m (including our own internal costs) to procure this, which is just over 1%. This is a remarkably low price, although still a lot of money for a council like ours. The reason we were able to achieve this is we did as much as we could in house with our own financial people and lawyers - who didn't have much experience but learnt the job as we went. Secondly we controlled our advisors rigidly, because if you don't control your advisors costs just go through the roof. We controlled them by asking them to give separate prices for each stage up to a certain date. We either got a fixed price, or gave them specific items of work related to specific elements of the scheme and requested estimates for this.
   The NAO did a report, and although we were not mentioned in a particular chart showing procurement costs of LEAs, we could tell by the capital cost figure we were the lowest (in percentage terms). We were able to achieve this because of the size of the project and the economies of scale gained as well as the control of advisors.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - if yes, please elaborate...

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   It was about 8 months, but nowdays it's much shorter - you can get it down to about 3 months.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

   The DFES advised us as to what inflation indicies and scaling factors to use, though I can't remember what that was.

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   Yes in our PB letter we gave a fixed price. We let them know at ITN stage what the PSC figure was and told them that we expected their prices to coming in very close to that our else we could not afford it and they would be wasting both our time and theirs. At the time this openness in regard to the PSC was unusual, but now I think it is standard practice. We had no choice because we could not fund the difference.
   The fixed price was predicated on completing the deal on March 31st, so we had to renegotiate after the March deadline. We did this in good faith based on the fact that we thought we would close by the March date.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Were the use of BAFO or FITN extended clarifications influential?

   See question A3 above.

F) Time - Historical

1. Have you had involvement in multiple projects?
   - if so, describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   Since we signed our schools project, we have since signed a lighting PFI project and in the final stages of negotiating a multi-agency project called the Devonshire Square project which involves social services, housing, health around the regeneration of a housing zone.

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   I don't think I can answer that. But if it was it would be due to the fact that the negotiation and procurement period is closing down. Also standardisation helps with the time and gives you increased certainty. So you can get to a fixed price quicker and hopefully stick with it.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase?

   See question 3A above

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   It's difficult to say, and while complexity plays a part I don't think size does. In fact you get economies of scale, the market is more interested which relates more to VFM.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

   We have had to add a whole raft of variations over the last 5 years, and will probably continue to do so over the next 20 years. Variations do have an impact on the financial model, either for good or adversely, you one needs to be aware that if you are asking for more capital to go in, then the unitary charge will increase and you need to understand what the impact will be on your costs and the money you will have to pay. So what we do here is re run *our own internal model, which is based on the contract model, every three months just to check that any changes we have instructed are not adversely affecting our ability to pay. So we use independent tracking, and we formally with the contractor do a proper financial model rerun every 12 months just to check that our own internal tracking is ok. We need to keep this affordable.*

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   See question A3 above

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the private sector partner during preferred bidder negotiations? i.e: that maybe resulted in you considering renewing discussions with a reserve bidder?
   - What was the influence of this on any price change?

   I think both parties acted very professionally so there was no evidence of this.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   In our case we were meeting the PP weekly and towards the end almost every day during the negotiations to work up the details. We were meeting the reserve partner once a month, and that just to keep them up to date really (not betraying any commercial things) and just say you're still there until we signed the contract. We felt that this was important and are doing the same with BSF (Building Schools for the Future) now. The reserve bidder knew the scenario and took their decisions as to whether they wanted to be involved or not, but we did say to them that other schemes will come up and that their continued interest will be noted. So the presence of a reserve bidder was real - although they did not turn out a full team but rather just one or two people but it was a presence all the same.

3. What do you think would be the effect on your reputation & the reputation of the private sector partner, if having got to preferred bidder you fail to reach financial close?

   That would be quite a disaster from everyone's perspective given the time and effort and finance that both sides would have expended.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

I said to bidders - look don't bid for everything, you'll never survive and you'll never do it. And in fact Jarvis did used to bid for everything. I said to them (bidders generally) you must be selective in what you bid for - try and sus out those authorities that you can make a contribution to, those that you can understand and can work with.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PRIVATE SECTOR INTERVIEW – Robert Longley – Kajima 8th August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects.

This is our European headquarters here (in London), and we operate in a few other countries. But principally our organisation (Kajima) is doing design and build work here in the UK and a large portion of which is PFI related work.
I am a director of Kajima Partnerships, which is our holding company which takes the sponsor role in PFI. So we end up being the SPV on any contract, and subcontract to our construction company who take the design and build risks for that particular project. From my side that is our business - developing projects and seeing them through to completion.
We have been operating for 5 or 6 years and have 10 projects up and running at various stages of the process. They include offices, education projects and health projects. We have developed that from a standing start and are now at the stage where we are consistently bidding and winning projects - we have a fairly good bidding record and currently stand at a success rate of about 1 in 2. This has probably gone down in the last 12 months before which we were winning around 2 in 3 projects we bid for.
In our organisation we have four directors - we have a managing director, two development directors of which I am one, and an operations director.
The development directors see the project through from first opportunity, through bidding, procurement, construction to completion. We have an operations director and staff that take over at handover once it is up and running.
We are actually not just bidding anything at the moment, because the last one just went through - we are at PB, we have one in construction, we have some in operation, and in the last 2 months we just sold our first project as well so we have been the whole way through the cycle. We are tracking projects just about to start coming through as well.
We have quite a lean organisation here, we don't have any other offices for our PFI team - it's all here and we tend to hire in people as and when we need them. We have a team of about 12-15 people.
We don't do the FM servicing, we subcontract that out to whoever is the best partner at the time. We have a select list of partners, but we don't do it ourselves. In most cases we do the design and build work ourselves, but more recently we have looked to subcontract to other design and build companies to try and spread our resources. This gives us opportunity to spread our risk, but also giving ourselves opportunity to look at schemes that might not be right for our construction company, in terms of location or timing, but from our side of the business they are equally attractive. We (the development side) are not just here to support the construction company, we are a profitable business in our own right and have to support ourselves.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   I think you will find that there is much less of that (price creep) now than there used to be. When PFI started nobody quite understood what they were getting themselves in for and at the point of pricing they didn't really understand it and things moved at preferred bidder quite considerably from

what was essentially a tendered set of documents, to those that might be signed up. A lot of things that used to be discussed at PB are now dealt with at tender stage with a more standardised set of contract documents, a much greater understanding of the issues that arise during the procurement and negotiations. Many of those are now dealt with at tender stage and basically there is less opportunity for deal creep once you get into the PB position. And obviously from a public point of view, they work hard to try and avoid that. So I think the past is not necessarily an indicator of what will happen in the future. There are a lot of issues that are closed down. The last schools project I was on had very detailed legal negotiations at bid stage, which on the first jobs that was all at the preferred bidder stage. Now we are right down to the very key elements of the wording of contracts and things and making sure that everyone understands exactly what we are signing up for. And that's all done at tender stage, so it's basically fixing your price against all that.
Inevitably, if you have a greenfields or a relatively tiny site, as a school site would typically be, there are less project specific issues with which you can negotiate around, and therefore the standard documentation tends to apply down to the letter. Whereas perhaps in a health environment that's not quite as true. In saying that with some of the BSF (Building Schools for the Future).

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   We don't do it in a very systematic way - the fact is that there are two of us that lead projects through procurement and we have both learnt through our own personal experience. We tend to use advisors who are common to both of us, and who are particular specialists in this market as you would expect, and have experience from other contractors. Most of the stuff is learnt through personal experience. We don't have a library of information, and we disseminate it in an informal rather than formal way - we all work in the same office so that's the benefit of having a small group of people in close physical proximity. If you work in a bigger organisation, working out of separate offices then this way of working would be a real challenge, but it's not something we have had to contend with particularly.
   We have three or four legal and professional advisors, insurance advisors and other advisors that we would typically use. We can't go outside that because you need to learn, and you need to develop relationships so it's a fairly tight knit group of people we use.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

We don't send our staff on outside PFI specific training. We spend a little bit of money on industry specific conferences and seminars. We are also provided with seminars by potential suppliers to our supply chain, or advisors, so we get benefit from that. Someone will come into us and they will tell us the latest about a particular issue, but that's not a structured training programme, it's just something we take benefit of. In some ways PFI is a relatively immature market, so there is not a lot of structured training process, so you have to absorb and take on board what information you can. We are all open to sources of information all the time. e.g. Our insurance advisors were interested in the issue of whether a SPV acts as an agent for the purposes of insurance broking under the new SFA rules - and they developed a through knowledge on that topic so I didn't need to go on any courses to understand that but I found out about it through the advisors - on the job learning.

4. Has your organisation worked with the same public sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   We haven't. There are very few organisations in the education sector that have come through with their second PFI project.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your public sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   When you are bidding work, we are in competition with others, and we have to promote a sense of partnership and working together with the public sector authority. But at the same time we have to recognise that we are in a commercial position and we have to take a commercial view on certain issues - and we have to make it clear to the authority what our position is. That's quite a difficult balance and we have been accused of being too commercial, but I think that stems from trying to make things clear. Where as other people we are in competition with have not had the experience we have and might not make things as clear, which actually just stores the problem up for the future - which is a problem that others just have to deal with. There is a balance in trying to be a partner to the future authority, while at the same time trying to win a competitive process.
   I think it is a very difficult process to remain 'friends' while at the same time trying to drive forward a proper sensible commercial bargain. At the end of the day the project documents are quite specific about a number of things. They are to some extent confrontational - because that is what a contract is. Its not confrontational but it does make you understand what side of the table you are on. It's quite difficult to do that while at the same time trying to engender a good relationship with the same people.
   The whole thing is a complex set of negotiations between the authority who are the client and the procurer, ourselves who are the sponsor, and our own supply partners and their partners. We have a number of interested parties coming in at different aspects of that chain, notably the bank who will lend us the money to carry out the project, but also typically a design team who have quite onerous warrantees they have to sign up to. The whole thing has to be taken forward under a reasonable sense of trust whilst at the same time it has

to be a proper commercial contract as well. And I think that is quite a complex process, and I think it's fair to say that that is quite a large part of my role is trying to engender a sensible approach to all of that while at the same time trying to get the thing signed up. I think the important thing also is that everyone understands where they are. I'm not a great advocate of partnering in some respects because it can be many things to many people. With a contract everyone knows where they stand - you're either one party or the other. I think for future projects such as BSF where an authority or others has an interest in a contract but still expects the private sector to deliver as if they didn't, I think will create difficulties.

2. How did think the quality of the relationship influenced any movement in price during the preferred bidder negotiation phase?

   I think the strength of the relationship allows you to overcome price difficulties. Whether the price difficulties are an additional price or whether you are trying to maintain an existing price.

3. What influence did the financier have on:
   a) Your relationship with your public sector partner?
   b) Any changes in price during the preferred bidder negotiation stage?

   They have an influence. There was a time where the funder and their advisors would not come in until later and would perhaps renegotiate some aspects of the contract at a very late stage - that just does not happen now. That all happens now during the tender stage, because there has been deal creep before involving the funder and their advisors. But everyone has cued to that now and most of that is dealt with prior to the selection of PB.
   We have not come across funding competitions ourselves, and it is quite a difficult one - the relationship between ourselves and our bank is quite a close relationship and it's not just about the terms, a lot of other factors come into it. Whilst the terms and money are a commodity in themselves the relationship is not, so for us to be told who our funder is going to be post bidding and it is just an open market then that would be quite difficult.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were bidding costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   Up until PB it's between 1 - 1.5%. At FC it's a lot higher than that - probably more like 5%. It's something we take less interest in because we consider the risk to be a lot less at PB - there is still a residual risk there but it's a relatively small one. It's more a timing issue than anything else.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - If yes, please elaborate...

   I think one is always sensitive to the fact that we have invested quite a lot of money up until that point, and we have to try and make the most of it. What stops us walking away is more reputation in the market than the cost itself. If we can't close a deal then what message is that putting out to the market. Because everyone knows what's going on, so if we said to an authority sorry but we just can't sign up on that basis are going to walk away, then that would pretty much be an own goal.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   Where the project stays to the original timetable there is no influence. Where the timetable - FC goes beyond the original date then there is every potential for some price creep because you are into a period where there you have increased costs that were not envisaged then there is justifiable cause for a claim.
   With schools, you are a bit more tied to academic timetables so time in school projects is far more critical because you are tied to an end date which is not as much the case in a hospital or office project where you are not tied to anything in particular. In a school if you go 2 or 3 weeks beyond the PB period then you could add 3 or 4 months to the overall project delivery, which would have a cost - so it is a good impetus to get things done.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   It is standard practice to have a fixed price. There is an area there which is an intense part of fixing the price and the strategy is the way in which the project is likely to develop beyond PB and the amount of time the tender is has to remain open for and how one assess what the increased costs will be. As a contractor you have to take a view on what's going to happen in the market and you are held to that. The longer the period for PB the bigger the risk, and the bigger the opportunity for change - for better or for worse.
   The authority determine the length of time the price is fixed til, but the longer the period the more room for error or variance in the contractors prediction of what the price increase is going to be during that period, which may or may not be a good thing for the authority because the contractor will usually err on the high side - so it might not be in the authorities best interest to set an unnecessarily long fixed price period.
   When the fixed price expires you end up having a new negotiation about what the new price is, and what the effect of the delay is.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Was the use of BAFO or FITN extended clarifications influential?

   As we are developing on, the more things that are dealt with at bid stage, be it ITN, BAFO, whatever, the less there is to do at PB stage - so the PB stage can be a shortened process. And that comes from there being a greater clarity on the documents. That's good and bad, because at bid stage we are asked to provide a lot more information than we used to, but there is a lot more clarity. We have to do two things - we do ave to produce a bid that will win, but at the same time a bid that we can see through to FC, because we know that we will not be able to renegotiate once the bid is accepted. So we have to go through a lot of work to make sure the bid is achievable on our side.
   It is less output driven now, but more input driven. This is because the authorities have been disappointed. When things were output driven, they found that contractors and providers could offer a different solution that perhaps in the test of time has proven not to be as effective but still meets the contract. So authorities are getting more prescriptive with their specification so are getting what they want. It ensures a level playing field in terms of competition. As a bidder, we don't mind competing against others for the same thing, what we don't want is to compete against other people who are

not offering the same level of facility. Now we can all get a bit cute about how we work around the specification of things, but fundamentally we would like to think we are being compared on a level basis.

F) Time - Historical

1. Describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

    There was price drift before, or if it wasn't price there was generally a negotiation which changed the detail of the project. You can either change the price or you can change the risks and responsibilities. There is far far less now than there used to be, and I'm sure there will be less and less as the contracts are more standardised and there is less scope for change - which is driven by central government and advisors working for the authorities who know the tricks and they try and iron them out before they get to negotiation. I think it is experience, that either advisors are applying to new authorities, or authorities are applying if they have done it before - where advisors have been caught out and they don't want to get caught out again so they are being more prescriptive in what they want at bid stage and how they want to see the information so there are not anomalies down the line.
    As first time clients, they get advice from their advisors, they get central advice from organisations such as 4Ps and PUK and they have their own forum within local government which disseminates information across authorities. But it is mostly from their advisors, which are selected on the basis of their previous experience.

2. What do you believe are the reasons for any historical price drift trends?
    - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase generally and price drift specifically?

    Where an authority has PFI credit allocation, that is specific in terms of their spending plans - they have a commitment to get it signed up within the year, so if it's getting close to March then that's something that is taken into account.
    The financial year is not an issue for Kajima.
    If you look at the education market rather than the health market, that is much more driven by the end of the programme. If you concider a project, it has to be finished by the summer if it's a school project because that's when the handover will happen. Then chances are it has to be signed up 2 years prior to that to allow a typical 2 year demolition and construction programme. So you find there is a certain bunching of projects - there is almost a 3 year cycle from when it is advertised to when it is handed over.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
    a) size / scale

b) Capital value
c) Project complexity
- How do you view the relationship between these factors?

I wouldn't say so, it is other issues that have much more influence on price creep. For instance, a project might drift because of a planning issue, which is far more likely for project that is 60m rather than 20m. It's more project specific issues. We have definitely had problems with planning issues - one job which we lost was in PB for a year longer than expected due to planning problems.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   The affordability issues are usually dealt with before PB - the authority should realise that there is an affordability problem at the bidding stage and try to sort it out at that stage.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

   We have certainly experienced the situation where something was introduced to the project at PB that was not expected - and one has to negotiate a new position as a result of that. It has its own influences, though I would not say the project itself drifted, but the price went up because the scope has changed. We have had situations where we have if something has been added in, we have had to take something else out because of an affordability issue. Inevitably we have had situations where we have had to change things to accommodate a new requirement.

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   We have had negotiations on who takes what risk where something has become more apparent during the negotiation that what was possibly apparent before - again its project specific. There is one example where we couldn't bottom out the risks associated with public access to this particular part of the site. So we negotiated a deal with the authority that dealt with a formula for trying to deal with the risks. This was something we just had to work our way through.
   There is a continual reassessment of the risk, but again there is a number of risks that in the past people did not fully understand but now they understand what they are and how to deal with them, or what their standard positions are on them. Again the public sector are much more constrained on what they can and can't do now and what the expectation is of the private sector.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the public sector partner during preferred bidder negotiations? i.e: that maybe resulted in you questioning the worth of continuing with the project?
   - What was the influence of this on any price change?

     We have seen examples where the public sector is aware of a problem and doesn't know the solution, and during the bidding stage just expects the private sector to deal with it, with the general caveat that the private sector has to consider everything. The public sector avoids problems they know exist but are not able to deal with, and expects the private sector to deal with it and take the risk on it. e.g. we have had a project where the stormwater outfall had to go away and the water authority wouldn't allow any additional charge on their systems. The education authority was not willing to deal with it so they made it the bidders problem, even though all the bidders had the same problem.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   No, never come across that.

3. What do you think would be the effect on your reputation & the reputation of the public sector partner, if having got to preferred bidder you fail to reach financial close?

   If you get to PB and you fail to reach FC it's going to send a bad signal to the market.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Every job we do now we have to provide more and more detail at bid stage to tie up the loose ends that would have remained open for subsequent negotiation on previous jobs. Which means that the bidding itself becomes more complex and costly. The problem with doing this is that at the bidding stage you are at risk, and still one of three.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PRIVATE SECTOR INTERVIEW - Colin McPherson - Carillion - 2nd August 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects. (GA to have as much background research on each interviewee as possible to aid this discussion)

   I'm the Commercial Director for Carillion Health. That means that I have input into all projects within the health market, whether it's PFI, Procure 21, LIFT, and outsourced FM projects. So I have a commercial responsibility for those. Prior to working in the health business, I was working as a part of the construction business in Carillion Special Projects. That part of the business looked specifically at PFI, PPP style projects. It concentrated on the construction element, where as now in the reorganised health department there is a responsibility for everything. There is a separation between health's role and that of the SPV, in the sense that while we principally negotiate the deal, there are issues that relate to equity specifically where a separate part of the business called Carillion Private Finance look at it the investments side of it. But in terms of mechanics or delivery of the deal (that which impacts upon the construction or service provider) which is 85% of the deal, is the part that we deal with in regards to negotiation. The bits that bolt in regarding strictly financing, which have no implications for the two principle subcontractors, are dealt with as a separate part of the business. At the end of the day the project agreement is the key document, and without the PA in place everything else does not make a lot of sense - finance documents without a project agreement don't actually mean a great deal. So in terms of the role I have an overview of all our projects.
   In terms of PFI specifically, I started working in PFI in 1998 with Kavaerner, as commercial lead on one of the first wave hospitals, the Queen Elizabeth Hospital in Woolwich. I was there for three years. I came in half way through the PB stage, which was more in line with getting some of the deliverables in terms of the detailed design stuff ready for close. I ran that through to completion, which involved some complex handover issues.
   After that I left Kavaener and came to Carillion and joined what was then Carillion Special Projects. I was involved with a number of custodial projects, either the bidding delivery, or construction phase. We were in the MOD market for a while, but they have very long lead in periods e.g. Colchester Garrison, and Northwood which has taken 5 years to get to PB.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   I think the things that drive it - there are a number of specifics and a lot of background stuff.
   The background stuff is in essence that in the market there are number of people that take a view when they are competitively tendering in PFI work on their bidded price. An example of this, and I raised this with a guy at Bovis, and he raised his eyebrows but didn't deny it, at Manchester where allegedly the trust advised bidders that they were going to introduce a variation at the PB stage, and allegedly the variation was worth about 20m pounds. Bovis bid at a number, and then priced the variation at PB at 70million. Now clearly they could have taken a view to simply discount the bid price knowing that there

was a variation coming at the PB stage. I think there is a distinct pressure in the market with regards price. I maybe would say this because of the role I fulfill, is that price is the distinguishing feature. If you are the lowest price you will make the cut - you can have the best design and be marginally more expensive and chances are that you won't. This may sound incredibly cynical, and it probably is, but this whole question of VFM you'll find expounded by the public sector, they do believe it, I have come across procurement directors at the MOD whose idea of VFM is lowest price. This is not VFM, but to their mind it is - they think that if they remove all the other issues so that everything is comparable on every other basis, then it simply comes down to the number. If you are a public body, then subjective decisions are hard to make. I think that the NAO would probably accept the decision to take the 2nd bidder because they offered other sources of VFM. But there is a culture within the public sector that they need to get things down to a very objective set of criteria and ultimately the lowest number is fundamentally the one they select. Even the NHS, who are now a very experienced client (as a whole) will still select on the basis of lowest price. On Walsgrave they probably had the design they wanted with us and the price they wanted with Skanska, and they simply leveraged one into the other. If you look at what Skanska have ultimately built at Walsgrave, it bears a remarkable resemblance to our scheme. A cynic would say, they looked at them and they compared lowest price and best design, and they had one of two options: they could have gone to the guy with the best design and said 'match his number' therefore artificially suppressing his price which means that at the next stage he will come back and have me. Or do I go to the guy with the lowest price and say 'match this design'?

There is an environment whereby the public sector is selecting on price, and the market knows that, and therefore the market may take a view as to where they put their FITN bid in, in terms of is it already discounted with a view to talking it up at the next stage. The strategy could quite simply be: suppress the bid price with a view to getting it up again the PB stage. I would have to say though, some trusts are better than others, some are very straight talking and some have a different style about them. It depends how robust they are as to whether some bidders will want to do that. It's not something we have taken on board - we try to play with a pretty straight bat quite frankly. If we are taking views, it's looking at the buying game/gain with our supply chain, not the trust.

The background is that there is this market pressure that you have to lowball to one degree or another you FITN price, so that when you step into the PB stage the private sector is incentivesed to look to opportunity to push the price up. When you do get into PB, there needs to be a recognition that, when you bid, even at FITN and all be it that you have spent maybe a couple of million quid, the scheme is not finally developed. Some of these healthcare schemes, especially the bigger ones, are enormously complicated, and when you bid it, it don't have a definitive answer for all the issues. This is not just scope in terms of the physical design of the building but also in terms of delivery of the service, and also in terms of risk transfer. The standard form of project agreement that has been around now for a number of years and that gives you a template to work from, but it is the all the project specifics that turn the project upside down. e.g. retained estate, at Portsmouth the trust changed their position on it and it took us 6 months to sort it out. The retained estate was brought in once we had got to PB. This demonstrates two things: first is the complexity issue, but there are always things from the ITN that are not quite right, and it is only when you get into the next stage that the more detail introduces...

I think there is a reality check, that is when you get to close (FC) you are going to have a fully documented deal which has got a 250million capital investment up front, and when you translate the service payments and the debt service and all the other bits you have a unitary payment over 30m pounds - so it's a big deal, 30 years at 30m a year is a big number. So there is no way you have dealt with all the issues at FITN, so it's a reality check. If you go in to the PB with a unitary payment of 10, chances are that you will not get to FC with a unitary payment of 10 - It will be 10+, not 10- unless somebody *descopes the project. If it is broadly similar scope, then the UP will creep automatically because of the issues around detailed negotiations on risk transfer, and the scope will change also - because at PB the client is confronted with the harsh reality that they were presented with two possible options at FITN, but one option needs to be decided upon at PB, and that is going to actually get. So what they agree to now, will be what they will be working in for the rest of their career (unless they go somewhere else). So there is a mindset change.*

One of the big drivers is that 1) you haven't got it sorted out at the PB stage, and 2) change - the trust introduce change in different ways: a) change in the physical scope of the project e.g. in Portsmouth the introduction of retained estate because the trust now longer wanted to do their own backlog maintenance. b) Imapact on scope for the service provider as well, and c) the risk that sits along side that e.g. if you want to add a brand new build ACAD on a 'greenfield' part of the site as a stand alone variation. There will be some issues around it but in truth the risk transfer issues are relatively straightforward. You introduce retained estate and the backlog maintenance and the risks associated with this are latent defects, condition of the building, extent of work you need to carry out - what performance standard are you aiming to achieve once you have completed the work and to what standard is it maintained during its life. Then the risk transfer is enormously greater than it would be on a greenfield site.

At the bidding stage anybody who give you a clean unqualified price for risk is lying to you. Every bidder will be taking the view that can't do a full intrusive survey because it is an operating hospital - you can do a superficial analysis of the building looking at the condition of the building generally, look at maintenance records, and the trust may well give you some relevant documents and records. But the position that all the bidders will take at that stage, is that because it is a deliverable everyone will put a number to it, but the number is an approximation because it will be so loaded with caveats that you can't really measure or understand the extent of the works, and until you understand the work you don't know how to price the physical work, you don't know what the programme implications are, and then there is whole question of the interrelationship between departments and decant with the trust. So these are the issues. We always say that this is subject to the proper due diligence at the PB stage. If the physical scope can't be determined then nothing else can be - if you don't know what work your doing you don't know how long it's going to take. At the bidding stage, if someone is trying to put RE on the table, then anybody that's pricing it will load it with a series of caveats, and that affects the figure, because the more the de-risk the scope the more flexible they can be with the number - and it comes back to bidders taking a view about the price with the intention of revisiting it at the PB stage. Smart trusts will discount it out, because there is no merit the numbers you have got. But then you have the question if there is any point in going to the market for the pricing of it. Do you (the trust) instead try and negotiate it off the back of the PB appointment.

There are different models out there to approach the pricing of risk, although there aren't that many different ways to deal with it. You are either going to take the full risk

When you get to the back end of the PB stage you get the due diligence done by the lenders TA, and their lawyers will throw issues up also. It happens every time. I will guarantee that there will be something on every deal that comes up. Project specific items that aren't covered in the standard project agreement. e.g. University of Hertfordshire, we got through to the very last stages and then the issue came up of whether the university had the authority ,or statutory right, to enter into the agreement - ultra vires.

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   Carillion are quite fortunate because each of the key elements of the project we have internally. We have an in-house finance business, construction business, and FM business. So in terms of pooling our knowledge and expertise we are not compromising our position on future projects, because we will continually work with each other providing an integrated PFI solution. I think there is a danger in terms of sharing and dispersing that information amongst your consortium, if the consortium you are working with today maybe the consortium you are working against next week on a different project. We have the luxury to be able to be quite open with the knowledge we have gained within the organisation. Knowledge management is a big issue - trying to retain it. We have documented a number of things: our approach to the bidding phase, our approach to commercial position - what we will accept and will not accept and where our negotiating tramline exists. This is fine, but at the end of the day the biggest driver is the people you have working for you, because no matter how well written the set of words are, they can't replace the person that had in mind the concept when they wrote those words - and you can't convey those on a piece of paper which is fortunate or unfortunate depending upon how you want to look at it. We have been fortunate in that we have retained a large number of people with significant amount of PFI experience in a medium/ senior management level. e.g At the project level, the team we have got at Oxford Radcliffe generally came off previous experience at Swindon. We have got people, such as myself, who have been through the bidding phase, the PB phase, the construction phase, and the service delivery phase. So we have got a good pool of people and we do concentrate on getting the right people into the business in terms of their experience of PFI. This does not mean that they need to be all knowing and seeing, but if they have a certain amount of experience in a certain area it gives you a head start. We also have people coming in cold, and the business needs that, but I think we have a good blend of people. We have a knowledge management system where by we retain the lessons learnt from previous projects.
   So you have data, and you have process (we have processes as to how you should bid, and how to get through the PB stage), and you have the people. Personally I am always give me the people, because they will find the way through the other stuff.

   The three criteria that will get you through to PB are a) the right number (price), b) having a building they like (aesthetic design), and c) the team - you (the trust) have to believe that you can do a deal with these people (the bidder). The fact of life is that through PB you have problems and issues that are very difficult to deal with and you just have to find a way through them. Usually everyone has to move a bit. It's not just the individuals talking across the table, but the organisations behind them - that they are representing, that may be a major part of the problem. e.g. The organisations will not agree to some of the concessions that might be needed to move the deal along.

   So in terms of our own organisation, we have generated a lot of learning, and in terms of our 'sell' to the public sector, we try and bring that to the party and say that we have this knowledge and expertise. It can be quite difficult, in that we need to be quite careful as to how we pitch it. Sometimes they do not want to be told the best way to do something. It depends upon the trust, some want to be led and some definitely don't. We use the word trust, but it is one massive public sector entity (NHS) and they have massive internal politics and its not always a level playing field for them. So the people sitting at the

table opposite you will have their own issues and politics going on in the background.
Although you make some judgements about the project and the public sector organisation before deciding to bid, it is difficult to do an analysis of the team, which would enable you to identify who is driving the project, and the people you deal with on the public sector side do seem to change with some regularity. So there is a general relationship with the trust question on the PFI project selection process - probably more to do with the chief executive, where have they come from, who's the chairman and what's their background.
So there is a consideration as to the relationship, but there is also a question as to 'can they afford it' and what are the trust advisors like? We did at an earlier stage have some baggage - the PFI market is actually quite small, so that affected some of our earlier decisions but is not an issue now. So you have to maintain a working relationship at all levels.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   We do have means of retaining that knowledge. The transfer of PB into FC ultimately becomes a commercial operation at the back end of it. Every one of the deals that we have closed in the healthcare sector in the last 4 years, that I have been involved with, so because of the size of these deals you have to be quite close to them at the end - whether its variations. There are a small number of people that do get recycled and that do see all the OBS. So we do have an electronic knowledge database - some of the commercial stuff is quite sensitive so that is kept as separate files rather than on a database.

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   We don't actually spend a great deal specifically on that. The market is very dynamic, so keeping up to date with the trends and direction in the market is a challenge. I don't know if you would call it training or not, but we do spend quite a lot of time interacting with our advisors (lawyers, funders or other consultants) trying to find out what else is going on in the market and what the position is elsewhere. That is very practical training but it's really knowledge gain - we are trying to assimilate as much knowledge as we can. We do spend quite a lot of time trying to develop our people (in-house), rather than send them off for training, trying to develop them to do more. Quite frankly it's not a big gesture on our behalf but it makes good business sense. Do more with your people is the company imperative - smarter faster better etc. i.e. making the people more efficient. So we are trying to develop our people to do a wide range of things - so where as we used to have a construction team, an FM team and a investment team, we now have a team, with all team members required to have an understanding of the other parts of the team e.g. the commercial person needs to have an understanding of the FM part of the project etc.

4. Has your organisation worked with the same public sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   We have done a couple of variations or bolt on to existing PFI projects e.g. Swindon.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your public sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   The short answer is no actually. Although some people in the market has the attitude that 'we are at PB now, we don't have to be nice any more'. The fact is that you have been working with these people for over a year usually by the time you get to PB, and although you may know some Jeckel and Hyde people who can do this - but I don't. People who can go from having a working relationship built on helping the public sector partner find a solution, to someone who at PB can look to extract as much money out of the client as they can totally forgoing the ITN relationship that was built. I don't know anybody that can consciously do that, and certainly as an organisation we don't support that because ultimately we are going to be the service provider for 30 years. If you have got a problem, you have got to be looking at things with a common perspective. If you actually disenfranchise these people, alienate them, and push them against a wall during the PB period that will come back to bite you - it's not a question of if but when. But having said all that, there are some difficult points during negotiation on all these deals, where that relationship gets tested. The things that really test it are the individuals themselves who lead the two sides and their ability to take their team with them, as much as it is their ability to negotiate a good deal. It comes back to if you can bring your organisation with you to agree something, then you will be completely isolated. I have seen this before in both sides. When you get close to the deal actually being finalised and closed, tremendous pressure comes on from both sides - from both organisations to get the deal done. And there is one easy way to get the deal done, and that is to say yes, whatever you want you can have - it is a bad deal potentially but it does get the deal done. People are getting put in a position in which they know that it is not the right thing to do, but they believe the only way out is to say 'yes'. I have seen it when people get to the stage where they perceive that it is all too difficult, there are too many issues, I don't know what to do. This is when it takes somebody else to step in and say 'let's take the issues one by one and prioritise' and that's where I tend to come in and help people. It is not a criticism, because they are very capable people, but it is an attempt to help them and the process. Our organisation is very supportive in this respect - its not a matter of replacement or someone taking over, but more support in helping unpick the problems. I have seen the public sector react very differently, and basically say if that's the person in charge and they can't deal with it, then push them to one side and someone more senior steps in to try and fix things. This actually slows things down because they actually don't know all the background. The other problem is that the person sitting at the front is heavily reliant upon their own team telling them the truth. You have to be hard with yourself - it is very easy to go into these negotiations believing you are right about everything and you get groupthink - so you need someone who will come in a independently review internally the current approach and thinking about the issues and negotiation. The ability to negotiate and close a deal with the public sector is heavily reliant upon your own internal organisation (in the broader sense including the consortium members such as the lender).

   We try not to change staff - the general concept is that the people who bid the project will take it through to financial close. During the PB stage the construction team will start to have increasing involvement until by the time *you get to FC you will have a full construction team ready to go. We have a programme director who will be responsible for the bidding phase, the negotiation phase, and their role will start to diminish during the construction phase although they will still maintain a presence and deal with any issues as necessary.*

2. How did think the quality of the relationship influenced any movement in price during the preferred bidder negotiation phase?

3. What influence did the financier have on:
   a) Your relationship with your public sector partner?
   b) Any changes in price during the preferred bidder negotiation stage?

   It depends who they are and what your relationship is like with them. There are different funding routes. In terms of how they influence the PB stage, we generally don't bring our funders to the trust meetings - we do on occasion when it comes to a crunch point, where we will utilize the funder's name e.g. saying 'we can't agree to this issue because our funder's wont let us', in the same way as the trusts on occasion will say 'it's a PFU point'. So its both using it as easy leverage. It depends who they are, but historically we have had good relationships with our lenders (although they are holding funding competitions now), and we tend to know what they expect and they tend to be comfortable with what we do, so we have a fairly well established understanding of generally what the right and wrong things to do are. They positively influence our relationship with the public sector, because when we need them to come to the table and say 'this is not an acceptable position'. What they bring is an understanding across a series of projects - a greater visibility and provide the 'market position' in a way we can't, therefore adding weight to our argument and unlock things. In terms of price change, what they want to make sure of is that there is enough money in the project, so they are coming at it from the opposite direction to the trust - the trust are trying to drive the numbers down, while the funders want assurance that if something goes wrong and they need to go and find a replacement contractor there is enough money to cover that (it being financially robust). An example of this was at Blackburn where there was an issue around cover ratios which were at around 120 - it was bond funded, and the bond funders said they the cover ratio was too low and they wanted it at about 125. So they did not directly influence the price increase, but relied on us to explain to the trust why there was not enough money in it.

   Funding competitions will become more common, because if you look at the returns - you scrutinize the construction costs and FM solution, but I would challenge whether VFM is being delivered through the funding of the deals. The funders do not like it, but I do see it becoming more of the norm.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were bidding costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   Do you mean Cap Ex? because it get slightly skewed because if you think of the constituent elements: you have the construction element, the FM element and the SPV costs. Now in terms of bidding, the biggest cost is in the construction element - the design costs slews the costs heavily over towards the builder. In terms of SPV you are only looking at their own internal costs and legal bills maybe the financial advisor and a bit of healthcare planning if the SPV are employing them. The FM is quite difficult to do a comparison against the percentages simply because the FM number and these bid costs make it look incredibly attractive. In reality we take a view across all three.

% of construction value you spend up until PB is 1-2% of project value. On a 100m pound project you would probably spend 1.5m, on a 200m project its around 2m. So its not a standard %, as there are a certain amount of fixed costs in there. Up to FC is based on how long the PB period is and whether or not you are going to do any physical work prior to FC. If you take that out of the equation on construction that can get up to 10% - usually 5-8%. It is very weighted to the PB period, so if the PB period spins out it's just money being spent, and it's not just the cost month on month, it's the impact on the model and the inflationary impact upon the construction cost with is different to RPI at the moment. So there are all sorts of things including long term interest rates.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - If yes, please elaborate...

   We turn it around the other way, and say to the trust that we have invested xm pounds in the project - we have shown our commitment to the project through this investment, so it's all well and good you saying no to this, and while the trust has invested also, it is not as much as we have. It goes back to the relationship, where both parties are absolutely incentivezed because you can't contemplate the ramifications of not reaching FC. You do get some off the cuff marks about reserve bidders 2 - 3 months into PB, but the threat is hollow.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   Significant - the longer you spend at PB, the more time you have to review the project documentation and the more problems you will find. If you have a team waiting and ready to start building the project, you have finished the design and are just awaiting conclusion of the commercial negotiation, then the construction guys will keep tracking over documentation and will find things. Trying to keep things in the box is very difficult in this situation. The things they find are not deal breakers, so we try not to let them get in the way and deal with them at the next stage.
   There is the ongoing clock, so if the PB period is predicated on 9 months, and you go to 15 months, then someone is going to pay for the 6 months. And the long and short of it is that it's not going to be us - this is a project company and its got no money or assets and you're asking us to write it off - why should we? No. So you do get into a fairly tough conversation about delay costs.
   Duration is not significant in driving the number up significantly, rather it is only significant in its effect on increasing bid costs. The thing that drive the price up most significantly at the PB period are change introduced by the trust and detail that drops out during the development of the scheme. The delay in getting to FC is usually a function of the first two things. They are interactive, duration is not the primary driver, but it does cost money.

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   It is quite common for the trust to expect you to keep your number fixed for a duration. e.g. they will set the PB period as 7 months but ask you to fix your price for 12 months. They will not often inform you of this at the start of the bidding phase, so you often end up swallowing several months worth of *interest. But they do have quite a bit of leverage prior to finalising PB so they usually get away with it. We have historically taken a view and assumed this. Once the fixed price period expires it's all bets off and the inflation calculation is back on the table. Forcasting inflation is not straightforward, in that you can go and get 3 or 4 different indices for construction inflation, and they will give you a spectrum which is enormous. You get MIPS, ECHarris, etc, and we do when we are bidding look at the cash flow and apply the indices and the range can be huge - one can be almost double the other. So there is quite a lot of scope when it comes to renegotiating the impact of slippage. They will say where did you get that from? Smart bidders may well make reference to a particular indices in their bid document, just as a hook to say that's what we always use.*

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Was the use of BAFO or FITN extended clarifications influential?

   I think that they have just retagged some of it; some of the things we do now at ITN used to be BAFO, and the PITN has become much more in depth and intensive.
   The bidding phase by its nature is very different to the PB stage because you are in competition. So whether given 4 months or 6 months for the bid stage, your thinking is about winning the bid, the output will be about lowest price and best design - giving the trust the words they want to hear. Where as the PB stage is about converting the 'dream' into a deliverable product, so in an ideal world if you are cramping that up a bit it is not detrimental to the overall project. There is a question as to whether the solution will be as well thought out as it could be. It is a difficult one to call, because you could get a bid 80%right in 3 months, where as only 85% in 4 months - you will never get it 100% right.
   Extended clarifications are influential in that it's the opportunity the trust take to squeeze and get everything clear in their mind that the bidder/PB has no 'wriggle room'. With the MOD, they use revise and confirm extensively e.g. Northwood. The public sector have people looking very closely at all the 'weazel words' and will come back and check exactly what is meant.

F) Time – Historical

1. Describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   God yes.
   The early deals everybody was learning, and everybody was concerned about what the implications were, (I'm giving someone a completely fixed price for 30 years which we weren't really familiar with) so we had fairly big risk provisions back then. Now you get them. So the early deals did have quite a big creep, even Swindon.

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   Standardised Contracts helped, bearing in mind that in the first deals the legal bills were in the order of 4m pounds, whereas now they are below 1m.
   The government has got smarter about managing the process - the Treasury taskforce and PUK. The PFU has added some benefits also. Now there is a lot more benchmarking.

Also, dealing with project leads on the public sector side that have had previous experience makes a massive difference. e.g. Vicky Lang is at Oxford and she had been at High Wycombe before that. While part of it is the individual, but she was a lot smarter having been through it once, so she could plan ahead and she knew what was coming - the issues and what her position was on those issues. To have a strong and experienced client is a big advantage for both parties, because the PB knows where they stand.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase generally and price drift specifically?

Never really seen it much on the public sector side. However, on one project to do with the university there was an imperative for them to get it done (deal signed) before a certain point in time or else the deal would not have got funding and fallen over. So while it wasn't linked into the fiscal year, it was linked into a certain milestone related to funding. This incentivised all of us really.
But it is not common to find that they are concerned about the fiscal year - they are more concerned about if they are striking a deal over 30 years it has got to be right. e.g. Walsall - there is talk about merging Wolverhampton and Walsall together, so if Walsall NHS wants to have the ability to make its own decision about its destiny in regard to the PFI project it has to select a PB before end Jan 2006 - while they still have a trust board.
The fiscal year does have impact upon our behaviour also, not very commonly, but there have been specific instances where it has made a difference and we have been told to close a deal by a certain date - usually the end of the year. The question in my mind is are we really being told that because it is vital, or is it a matter of putting a line in the sand to finish the deal - because new things will keep coming up. In regard to our business, it's a nice to have in regard to end of year accounts - so it shows that you can churn them which helps market confidence but is not of central importance.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

It is project complexity, rather than size or capital value, and related to project specifics such as retained estate, energy solution, medical equipment, interim solutions etc. A small project could have a large MES component in it and as a result take a long time to close.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

The public sector client always uses affordability in PB negotiations - 'you've hit the top of the envelope and there is no more money'. We talk about it and we do recognise that it may be a problem, but they usually use it as a smokescreen - if they want to get affordable, they can get affordable by changing the scope.
We have been involved in projects where in order to fund the increased capital cost of the project we de-scoped the services FM, so we effectively suppressed the services component of the unitary payment in order to compensate for an increase in the capital cost. In the way it's modelled it is pound for pound on one, but not the other, so if you save 0.5m on the FM you can fund 5m worth of construction. The trusts are smart, they are used to

finding their way around funding issues - as public sector bodies they have always had to deal with funding issues.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   It is not common that risk is reallocated - reassessment of risk is more common at PB when more information and detail becomes available.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the public sector partner during preferred bidder negotiations? i.e: that maybe resulted in you questioning the worth of continuing with the project?
   - What was the influence of this on any price change?

   All the time - perhaps not sincerely. They want as good a position as they can, and they are tough and have had a culture of having no money. So the are opportunistic and if they can find a way of suppressing your number and get something out of you for nothing then they will - they are good at getting something for nothing, and you sometimes walk out of negotiations and think you have been mistreated, but you are never going to walk away from the deal. At the end of the day you have to take a step back and think, they have just negotiated x pounds out of me, but that's ok because we have made y pounds over here which they are not necessarily aware of - so you have to be pragmatic.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   No influence whatsover, unless you do something in the first few weeks, which is very unlikely because you are still in the honeymoon period - it takes 3 months before you start to fall out with each other. The reserve bidder is disbanded and there is no chance that they will be sitting around waiting. So it is not a real threat.

3. What do you think would be the effect on your reputation & the reputation of the public sector partner, if having got to preferred bidder you fail to reach financial close?

   The reputational effects of failing to reach FC are significant. The trust want someone they know will get them to close, so if we failed to reach FC on one project, or the deal collapsed, the implications would be significant on our other PFI workload simply because people take a view as to whether or not we are a viable PFI consortium. Everybody has different perceptions of any *reasons so it would not matter what the reasons were, the PR would never cover the damage.*

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PRIVATE SECTOR INTERVIEW - Mark Mugglestone - Skanska - 22 July 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects.

I have been in construction for 17 years, 16 of which were with Firm A (previous firm / employer) I have been involved with PFI for 5 years, my first involvement was with the first wave schemes, were I was responsible for the mobilisation phase of project X. I managed the mobilisation of it for Firm A, 8 months ironing out services, esp medical equipment. Involved in strategy after that (2002), selecting what projects to bid for and market strategy. Looking at diversification into lift and P21 as part of a hub and spoke strategy, where they get the main PFI project and then the smaller scale follow up services in the same area / trust. This has worked at Project X. It did not come to fruition properly as Firm A did not have the resources. Then was involved in Project Z bid, where I joined to do the project management on the construction side, but did design management for the one of the sites and then the whole project. I took that to failure, and then moved onto Project W, and reviewed whole scheme in terms of affordability and if the design was what the trust wanted. Part of a kneejerk reaction to the Project Z loss.
Current position is Bid Director on SIP (Skanska Integrated Projects) Walsall PFI bid.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

The issue with going from PB to close revolves a lot about the understanding of the project and what you have managed to develop up until PB - in terms of the level of service provision and the design. In the early projects there wasn't an understanding of the amount of design that needed to be done before you got to PB, or even an understanding of the services that would be provided when you got to PB. It was very unusual to have a payment mechanism in place and also unusual to have scope resolved for the FM services. So I would guess, and I don't know what the record shows, that the early schemes would have shown an escalation in price. There is certainly a requirement for a lot more design development prior to PB. On the early wave schemes, 1:50s were an enigma, where as now it is expected (by the Public sector) that you will get a fully developed design. At Project X, at handover (operation) we were still trying to establish the FM scope, and hadn't fully resolved the payment mechanism - related to how measured the performance of the FM services. Now, at PB the expectation is that all these issues would be outlined, and the project agreements are a lot tighter in structure so the bidder is tied down to what he has to deliver even at PB stage. Going from PB to FC is as much to do with what the PB's tatics were prior to PB and how educated the trust were in terms of how they have tied the PB down. I know of a number of projects where the PB has bid low and talked the price up (this is well known in the market place). There is also a general misconception as to why the bidder has bid low - there are 3 projects I'm aware of where the bid has been won (not through the use of any bid tatics, such as offering to do large enabling works prior to FC and then actually not wanting to do those unless the trust underwrites the cost, and the trust does

not want to underwrite the cost, so the PB says they are not willing to do it so the programme extends and the price goes up.
Another bid tactic revolves around the retained estate, is common to caveat out everything you can on retained estate, and then come back to trust afterwards and claim there is a greater scope. Trusts are now aware of this, where they weren't aware of this. Certain amount of ignorance on bidders behalf - 2 ways: a) if they knew about the risk they wouldn't take it on and wouldn't price for it, which would mean that their price was low, while the trust was expecting them to have included it. b) They just totally underestimated the risk involved in doing the retained estate works. Ignorance on behalf of trust by accepting a PFI bid that caveats out the retained estate.
The other reason for price inflation has been genuine mistakes by the contractor in the bidding phase. 2 projects specifically where there has been an increase in value substantially, as a result of genuine mistakes rather than lack of integrity. The problem is that once you have gone to PB it is a political nightmare that the mistakes have been made, and also the trust are not going to take on another bidder because they have lost too much ground. So whatever the price is, you are both in it together and there is an element of faith that the trust puts into the bidder in going into the PB phase. Like there is in any contract, but with traditional form of contract you have tied the contractor down it's totally his fault and if he walks away you have to start again. With PFI however, because you have developed so much together, that by the time to get to problems with money before FC, the process is so long that you would have to go back and OJEC again. Sometimes you would have a reserve bidder in place, but they do not always name a reserve bidder. They threatened to bring in the reserve bidder on the Project Y (not one we were involved with), but never came to fruition. Price drift in this project was the result of a change in scope (expansion in area required), initiated by the trust, but still blamed on contractor in press.
It seems to me that there are 2 ways to approach the bid: a) go in with as ethical a manner as possible and try and offer true value for money b) Or you can go in with a cut throat price , with the intention of driving the price up between PB and FC (and there are still companies that are doing that). This does not affect their reputation in the market because there are so many reasons why the price may go up, the marketplace does not know if the price has inflated through unethical behaviour or genuine mistakes. The market often reads price drift brought about by trust mistakes as the fault of the contractor. The trust never wants to admit that they have made mistakes publicly.
The private sector will always price the market rate, and the public sector will always underestimate what the market rate is, part of the reason for this is the length of time taken to get to market. They are difficult to forcast, and if they forcast what they thought would be the true value they would never get funding approval (this is not just PFI, but all public sector procurement).

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   Firm A had good theoretical methods for knowledge transfer, whereby they had a system called 'i-connect', where if you had a question at all you just *rang up, and a central administrator would connect you to someone else in the organisation that could answer your query – who had done it before. That is all very well, but there is a culture in the industry of not wanting to show that you did not know what you are doing, therefore not many people used the system. There was also a programme called 'communities of practice', where lessons learned from past projects were fed into new projects. The idea was that people involved in healthcare would meet up and discuss the issues in a group forum. e.g. technical problems with one aspect of a previous project would not be repeated in subsequent projects – such as the showers trays in Project X. An informal way of formally capturing and disseminating knowledge. It worked, but the problem was that the length of the projects' procurement (3-5 years in healthcare) before the issues became evident. By that time you had bid other projects. This is mainly related to construction issues. Construction issues do feed into the bidding phase and have a link with contract negotiation skills – PFI is no different to other types of procurement in this. You have a set budget and a set margin. If you find that you are overspending your budget on bids, and are not winning, then you have 2 options: you either don't bid, or you slash your bid budget. In terms of the tatics you display, if you are beaten on price then you find out what the market price was and you make sure you are not beaten on price again – its as simple as that really.*

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   Communities of practice was centralised (representatives from each of the projects would attend). However, the unfortunate thing was, there would be a report produced as a result of the communities of practice, but it would not get circulated because it was felt that it was too commercially sensitive to distribute widely within the company. Similarly, the business plan would not get disseminated for the same reasons – only the board would have access to it.

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   The extent of investment in PFI related staff training: None at Firm A and don't know at Skanska.

4. Has your organisation worked with the same public sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   Working with same Public sector partner for more than one project: No, because in healthcare the trust usually only has one large PFI project. (what about hub and spoke?) What you do find though, is you come across the same Public sector characters on different projects for different trusts – the public sector project directors move around, following the schemes rather staying at the trust, since once they have delivered the scheme they have achieved what they were there to do and the move on. Their experience and relationship has an effect on reducing price movement generally, including at the preferred bidder stage.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with - this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your public sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   No comment.

2. How did think the quality of the relationship influenced any movement in price during the preferred bidder negotiation phase?

3. What influence did the financier have on:
   a) Your relationship with your public sector partner?
   b) Any changes in price during the preferred bidder negotiation stage?

   Most of the PFI consortia bring in somebody to 'close the deal'. This person is not usually involved with the bid previously, and comes in with a hard nosed commercial deal closing mindset - just for this phase. All the healthcare consortiums do this. However, some trusts have requested that the same team as was selected as PB is the same one that closes the deal. They don't want a heavy handed bully come in. This still occurs. What the trusts don't realise is that if the consortia did not have anybody like that the project would take a lot longer to close (it would possibly never close). So they are there to drive the process - if the process does not get driven the deal does not get done. There is definite value for everybody in getting the deal done quickly (within reason). e.g. If you look at a project that is £180-200m, the typical deal may cost you £100k per month. Every month quicker that you can cut the construction programme or deliver the project gives you £100k. This is purely in the financing of the deal and does not include the costs of staff trying to close it.
   Enabling risk: if the trust is underwriting the enabling risk, which often doesn't happen, the consortia would like them to underwrite it. The trust would like the consortia to do the enabling works at risk, and a large part of the 'sell' (ITN stage) is how much you will do at risk. The amount of enabling works done at risk depends upon how confident the consortia are that the project will go ahead. Certainly in the current climate, with all the strategic reviews going on in the health sector, companies are much less willing to put money at risk to fund enabling works at the PB stage prior to FC. The current deals have less exposure due to the thoughts that the trust will not reach FC, or that the project will be delayed. What you will find as, is that as a bid tactic you will say that you will do the enabling works at PB, which will give you a quicker programme, which will give you earlier revenue. In reality, at PB you ask the trust to underwrite the enabling works, and the negotiation revolving around this issue takes up a lot of time. This is not a tactic that Skanska would use, or an attitude that Firm A would have used either - it is something that happens in the market.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were bidding costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

0.75 - 1% up to PB in terms of bid costs. If bidding a job that is around £850m, then the bid costs are around £6.5m. You then have massive exposure up until FC, and I don't know what that is.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - If yes, please elaborate...

   Yes, absolutely, not just between preferred bidder and financial close, but continuity of the bid at all. Obviously if you have just sunk a £1m you are going to finish the bid - even if the trust has extended the ITN twice and refused to call it a BAFO, and you are still paying time based design fees which increasing the cost of the bid, you still carry on. Once you have started you are really obligating yourself to see it through, which is why it is so important to have a sensible strategic review of which bids you are going to bid before you bid them. There are some firms that don't do that properly i.e that if it's over £300m then we'll bid it - which often comes from a sense of invulnerability (maybe they have just won the last 3 they have bid for). There are markets where you would want to buy market leadership, but PFI is not one of them, so bidding lots of projects to acquire market leadership is not a driver.

   You could put the shutter down on PB at any time, because what that's doing is removing the competition not necessarily changing the deal.
   I think the biggest plus the process gives the public sector is a free design consultation, because like it or not, if you have 3 bidders the final design solution will have elements of all three bids - so they get the best. So that's what they are spending public money on. This is offset however by the lack of access between the designer and the public sector client / user.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   Can't answer that

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

   Already discussed this

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
   -Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

   Every offer we make to the trust is meant to be a fixed price, but as soon as you go into the PB stage the trust will change something. This price is usually fixed for 12 months.

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Was the use of BAFO or FITN extended clarifications influential?

   Already answered and discussed

F) Time – Historical

1. Describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

I think the PSC is getting closer to the outturn cost as time has gone by. The market has got more refined.

2. What do you believe are the reasons for any historical price drift trends?
   - Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   Optimism bias, is a factor, with the trusts now having a better understanding of what to expect.
   Standard contracts have definitely had a major impact on tying the private sector down at PB more so than FC - it creates more of a level playing field since you know what you are bidding against. The bidders may have issues against the standard form, but they all have the same issues.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase generally and price drift specifically?

   Yes, we (the private sector consortia) will want to close the deal (reach FC) before the end of the financial year. This was in March / April for firm A which coincided with the public sector end of financial year. December was never a driver.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   Yes, the larger and more complex the project the greater the price drift is going to be. The larger the element of retained estate especially, the greater the price drift will be. Understanding the scope of the retained estate (Mechanical and Electrical mainly) is very difficult. I'm sure you will find a correlation between price increase and retained estate. If not in the figures you have now, then definitely in the next wave of PFI schemes. All of the deals that I know are being closed at the moment, are encountering issues around the retained estate.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?
   Its like any public sector, as soon as they make any change (in scope) then there is a price change associated with that change that they hadn't budgeted for.
   Due to the size of the projects, it's difficult to understand all the issues until you get to PB. Even though the design is developed more substantially now prior to PB, a lot more substantially than it used to be, there are always price increases as the design develops in the PB stage - the more you know about it the more expensive it gets.
   The scope is generally cut if necessary to tailor it to the required price.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price

change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   I have no direct knowledge of reallocation of risk, but assume that there must be some - especially in relation to the retained estate. Where there is further survey done. Prior to PB the trusts don't necessarily want the 3 sets of bidders to have access, since it is incredibly disruptive. Also, they don't want to employ someone themselves since it is a capital outlay. Instead what they try and do is they say it's a PFI risk - you bid it, it's your risk. The reality is that the bidders will caveat the retained estate, saying it's subject to survey. Then as soon as the survey is done at PB, the price changes (with retained estate, generally the more detail that is developed the more expensive it is) . There is a certain level of naivety on the trust side, they think they are shifting the risk onto the private sector, while avoiding the cost of carrying out the survey which is quite a large capital outlay, but the private sector just caveats this and the price increases once the survey is carried out.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the public sector partner during preferred bidder negotiations? i.e: that maybe resulted in you questioning the worth of continuing with the project?
   - What was the influence of this on any price change?

   One particular circumstance, where we had invested too much in the bid to drop out, our affordability innovations were developed for the trust and then the trust published these as part of their own list (24 of the 27 were our innovations to affordability) which were shared with the other bidder. This resulted in exchange of correspondence at board level between the private and public sectors, but the bottom line is that we were not going to drop out.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

3. What do you think would be the effect on your reputation & the reputation of the public sector partner, if having got to preferred bidder you fail to reach financial close?

   You would be out of the market place. It is in both the public and private sectors interests to reach FC. The consortia's reputation gets trashed if the cost increases, even if it is not your fault. But in saying that the trusts don't seem to talk to each other, or sometimes are not aware about the reasons for cost increases on previous PFI projects.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.

PRIVATE SECTOR INTERVIEW - Mel Holloway - InterserveFM - 26th July 2005

A) Introduction

1. Introduction of who I am, where I am from, my research topic and what I would like to achieve from the interview.

2. Briefly describe your role within your organisation, and the scope of your (the interviewee's) involvement in the PFI market and specific PFI projects.

   My role in the organisation (Interserve FM) is that I'm the Group Business Development Manager, mainly responsible for PFI projects. That manifests itself mainly in the healthcare sector, although we look at courts, schools (shared with another office) and MOD work (in PFI as well as alternative procurement routes). My specific experience in the PFI market is that I have been bidding PFI projects for about 7 years. I came into this team in 1998, and started in healthcare.

3. Firstly, I would like to begin by allowing you to discuss any issues you regard as important to the subject of price drift during the preferred bidder negotiation stage of PFI procurement. Please feel free to refer to a single project, or a series of projects to illustrate specific or generic observations or opinions.

   Preferred bidder negotiations, I suppose the first thing that happens at PB is that when the client gets around to choosing a PB, it's generally at a stage in the design process where there are a number of variables that could change when you get further detail. It depends upon the particular project, but you get to a stage in the design development that fixes the outside envelope, but what goes on inside the envelope is very much up for grabs during the PB stage from the client perspective. They tend not to have involved too many of the clinical staff at the ITN stage. They have had high level involvement, and the level of detail in the design does not go that far. From my perspective, I'm looking at the facilities management of that building, if we use hospitals as an example, it is full scope of services which includes cleaning, catering, hard FM. So it covers a wide range of services, all of which are affected by the building's design - its layout, its shape. All of those have a significant impact on the service delivery proposals. You get to a point in time at ITN (or maybe BAFO) stage where you are either choosing 1 of 3 or 1 of 2 bidders. Each of the bidders would have got to the same stage in their design and FM proposals, so they are able to put a price to it but their will still be a number of commercial issues hanging out and the client makes a judgement as to whether those are fundamentally going to change the price or not if they go with that bidder. Along side that there will be the position of the funders, who will have certain issues. Although the NHS has a standard form of contract which is fairly well negotiated now. There are lot of deals that have been closed on the latest standard form of contract now, so the funders know exactly what issues are up for negotiation, they will only raise these while everything else will be accepted. It is the same with the parties, the contractor and the FM contractor, they will have a number of issues that are always left hanging out, but they are hardly ever fundamental in anyone's ability to be able to close the deal. So they will all be set out in the PB letter. Just before PB is chosen, both bidders are interrogated quite intensely on the issues that they have left, on their price, and giving enough detail for the client to understand where the price differences are between the 2 bidders. Sometimes there is clear water between the bidders so it is quite straightforward - one is just so much better value for money that the client has an easy choice to make. But sometimes it's not - there are enough big players that have done this on a number of hospital deals now, that they know where the market is in terms of building price and FM price. Funding - well all the funders fund different PFI projects all the time, so that the actual margins that funders want are pretty *much the same. There are little idiosyncracies around the edges in terms of funding solutions that may or may not get you into a position whereby your unitary fee is slightly lower than the other parties, and then that is the deciding factor between the bidders. I say that, but at the end of the day, they (the public sector authority) have to be convinced that they have got VFM. It may well be that they don't choose the lowest unitary value for their PB. A lot of the decision making surrounding the selection of PB centres on the building solution. I can think of one instance, where we understood after the feedback that the 2 unitary fees were almost identical, but the design solution gave significantly more on one bid than the other. So they did not choose the cheaper of the two, but the difference between them was so small that the benefits they were getting from the space layout and design of the hospital, the more subjective decision making processes, kicked in, and they were the ones that were chosen. Partnering issues are also a big part of these deals. You are talking about entering into a 30 - 40 year relationship and if you can't get on with a party at the PB stage, what chance have you got for maintaining a relationship for 40 years. Those are more subtle issues that do become important - deciding factors, when the commercial factors are very close. Interestingly enough, the relationship and the aesthetics of the design become deciders quite early on, when you first get through the prequalification stage (PITN).*

Interserve makes a decision very early on, before the project comes to the market, about whether we are going to bid for a project. A lot of that decision making process is about what we think of the public sector team. We go and visit them years before the project comes out, and meet the team, see how they set themselves up and decide if this is really a team that can deliver this project. If we think the team is too weak then we will not go for the project. They have determined the PB, you then go into a fairly intensive period of a number of parallel issues going on. 1) very intense design development - in one project I was involved with we got all of the 1:50 room layouts done by financial close. Which is a massive amount of time for a number of individuals, including FM people. There are usually 3 rounds of user group meetings for each 1:50, which takes up a huge amount of time, leaving virtually no gap in between. So I have to allocate dedicated resource to this task, while the contractual negotiations are dealt with by separate people. We tend to have people involved already (at the ITN stage: a commercial guy, legal, a bid leader). You get a certain amount of financial discussion, but a lot of that can't really get into action until the design has got to a stage where you are fixing your final price.

There are a number of things that can happen at the beginning of the PB stage. The trust possibly still has an affordability problem - and that can be delt with in a number of ways - either means they are going to end up getting a smaller hospital (scope change), they may not decide to build a new ward. There is always an issue in terms of affordability. So there a whole series of negotiations going on between them and their PCTs and SHAs to actually get the funding in place to actually afford the solution they have got. If there is a shortfall, you then need to look at the design in terms of what could or could not be done with the design, and there are a number of iterations that usually occur. You cannot get too far into the design development phase before you have sorted that bit out. It may well be that there isn't a problem like that and you can just start ploughing into the design, and then the only real price creep comes out of the level of detail you have got into in the design. Prior to PB stage there will be elements of the contractors price that will be just a straight percentage, e.g fixtures and fittings will be just a straight percentage of the total capital price. Once you get into 1:50s, you then literally count up the numbers of fixtures and fittings and put a firm price based on that.

You put a fixed price in at PB, and it's fixed for a number of months, but because it is based on a certain level of detail of the design, you will find that this price will change once you have clarified the detail. In the best world scenario, you will find that this price is probably higher than the one you end up with, because once you have clarified the detail the risk pricing you have put in could be taken out. It really does depend - I have seen pricing come down during the preferred bidder stage, but I have also seen it go up. Most *times it has gone up because of scope changes, its very unusual for it to have gone up for reasons other than that, or items that the contractor may have caveated at the ITN stage that feature in the PB letter e.g. ground investigations. That weren't done prior to PB. Clients are getting better at things like that and are actually procuring ground investigations before choosing their PB, and making it available to all the bidders. There are lots of retained estate type issues - some projects I have been on, once the PB starts to survey the retained estate, the project becomes less and less affordable and the retained estate gets taken out of the project. The retained estate is quite a difficult area, because what you tend to do is 'take a bit of a punt' - make an educated estimate, as to what the lifecycle and refurbishment responsibilities might be, because you have not been given an opportunity to do fully intrusive survey. You have to establish age, condition, just by wandering around the site. We tend to use professional advisors to come up with a lifecycle plan for it, but it is invariably much more than the public sector comparator ever allowed for - typically 3 -4 times as much. It is a serious issue and has scuppered deals completely e.g. Plymouth had a massive component of retained estate (more than 50%). They ended up with only 1 bidder because everybody else pulled out. It was partly risk, in that contractors hate refurbishment work generally any way, but also mainly to do with establishing how much you have to do, and you can be wildly different. Bidders have been wildly different in terms of determining how much of the hospital needs refurbishing and how much doesn't. This results in completely different pricing - it becomes a scope issue and a problem for the public sector client to determine how the prices compare since the bidders are essentially taking a view on what the refurbishment scope is and pricing accordingly. So whilst some deals have got to PB with retained estate in them, sometimes the retained estate becomes an issue at PB stage when a fully intrusive survey is carried out. The will say that they did caveat this on the basis of being able to do a survey, we have now done a survey and it is four times as much (for example). This would be a problem in any sector where there is retained estate or refurbishment work, but it is exacerbated in healthcare because they do tend to be more technically complex buildings. It's generally the M&E that causes you the problems. If you have a concrete frame building, the frame is going to generally last 80 years, while it's the internal and external finishes, the roof and all the M&E.*

The following questions are designed to prompt you (the interviewee) to elaborate further on PFI preferred bidder price drift issues that I have identified as being important in my research to date. We may have already covered many of these, in which case we will skip over them and concentrate on the issues that have not yet arisen.

B) Learning Organisation

1. How much experience of PFI has your organisation had? How has this experience impacted upon:
   a) Knowledge held in the organisation
   b) On the way you access expertise from others?

   There are two things mainly, we as an organisation have been involved with PFI since its inception. The FM part of Interserve was originally called Building and Property until Tilbury Douglas acquired us. We had three of the earliest projects on the go at the same time: the Cumberland Infirmary, UCLH, and Newcastle Estate for the Inland Revenue. So in the organisation we had a great deal of expertise. Most of the knowledge about the negotiation of these deals is probably held within this floor - within the Business Development Team. However we do have operational contracts that have been operational for some time now, and we access that expertise on a regular basis when bidding for new projects. So our operational team actually come in and inform the process - they actually do presentations for us and all sorts. We have a *tremendous expertise in achieving transfers from the public sector - we were a public sector organisation ourselves. We are a facilities management organisation so our business is all about managing people and delivering services. So we have a very good knowledge of the public sector and how to work with them. We very quickly recognised (in 1993) that for an organisation such as ours PFI was a market that we were quite familiar with in terms of our ethos, but also that it offered the right sort of revenue streams for the long term. A lot of facilities management organisations survive on 3 year contracts, but we wanted to see long term contracts to give us the stability to go out and look at other markets. Most of our work is in the public sector.*

The way we access expertise from others is that we always bid PFI projects as part of a consortium, and we have worked with a number of different partners. We tend to get settled with a particular partner, or set of partners. When you work in consortium with other companies, by its very nature you gain expertise from them and they gain expertise from you - they have done deals you haven't, and vice versa. It is a very interactive process - sometimes you are providing a role as part of the team that you haven't done before, so you are picking up new skills that way. What you tend to find that people who are involved in this process are quite well sort after in the jobs market. We have worked with a number of different partners in consortiums: Amec, Balfour Beatty, Sir Robert McAlpine, Alfred McAlpine and Keir Construction, Lang O'Rourke and Equion. Most of the partners we have worked with were either in the formative stages of developing their own FM offering, or had small FM companies that couldn't really handle the size of these projects. Lang O'Rourke don't have an FM component at all which suits us. We do have a building company and do bid projects as a full Interserve offering -but not large scale healthcare ones.

2. Does your organisation have established formal processes for collecting, organising / storing and redistributing / reusing PFI specific knowledge (especially in relation to the preferred bidder negotiation stage)? If so what are they?
   - Is this knowledge and expertise stored / accessed locally or centrally?
   - How would you describe the reliability and ease of access to this data and expertise?

   The knowledge is held centrally on the business development server, where we have project knowledge going back to 1996. Certainly all the latest bids are held centrally and each bid tends to be a development of the previous one, from an FM point of view. It also informs the commercial or pricing aspect of the bid as you learn through feedback, or learn through getting hold of information from competitors - there are a number of ways you learn about what is the best bid model to put together.

3. Describe the extent and type of investment your organisation makes in PFI related staff training?

   PFI related training, tends to be mainly for the business development team than anyone else, and it tends to be these PFI seminars that abound in the industry. We also do internal teaching with our teams about what some of the key issues are in terms of PFI projects. Although most of it is standardised these days, there are some pretty clear risk issues for the contractor, and its important that anybody who gets involved in negotiations understands what the risk issues are - where you can get to in terms of any negotiations with clients. So we do have sessions where we train the staff. We also for the operational teams, prepare quite comprehensive handover summaries - informing them of what the project is about, the key commercial issues, this is what we are meant to be delivering.

4. Has your organisation worked with the same public sector partner on multiple projects?
   - If so, has this had any direct impact on the change in price during the preferred bidder negotiation stage?

   While we have worked with the NHS obviously on numerous occasions, we only work with the individual trusts on one project. Our construction side as part of UKDS (UK Detention Services) ltd has worked with HMPS on more than one occasion. We as an organisation aren't part of that.
   I have not worked on two projects where there was the same project director. One of the good things that is happening in the NHS is that we are starting to come across project directors who have done one (a PFI project) before, which is really good. We have just signed a deal with Newcastle where the project director for the trust had worked on the Durham project, so he brought that experience with him. It does make the job a lot easier.

While the questions just asked referred to general matters related to your organisation, can we now talk with reference to specific or generic projects that you have been involved with – this can be at any level - tactical to strategic.

C) Relational Contracting

1. Describe the relationship between your organisation and your public sector partner during the preferred bidder stage?
   - Did this change, and if so how? (press them on issues of 'partnership', confidence and 'trust' and 'win win' also inquire about changes in key contract negotiation staff, any co location etc?)

   There is a subtle change in the relationship between the PB and the public sector partner at PB. A lot depends upon how open everybody was during the bidding phase. We try to be as open as possible - we have actually lost bids because we have possibly been too open, but the advantage of that is that we you do reach the PB stage there are no surprises. The ones you win become that much stronger and that much easier to negotiate. Things, particularly towards the end of the negotiation phase, can get a little fraught. But if you have built the foundations of the relationship then you can get through that, and there will come a point when everybody will throw their toys out, usually over one issue - the most minor of issues. Both public and private sector parties may refuse to concede - you get into these really esoterical discussions about unbelievable eventualities and you think how well how would this actually manifest itself? You sometimes get to the point when you think - it's only going to cost me a tenner to do this so why don't I just back down and do it, I don't agree with the principle, but why don't I just back down anyway. Sometimes you have to say, we will agree to do this to get the deal signed, but we do not want this to be used by the NHS generally i.e. let it set a precedent for future deals. Private sector bidders do not go into this, incurring huge amounts of cost at risk, to get to a stage where you have to walk away from it. You have got to sign the project.

2. How did think the quality of the relationship influenced any movement in price during the preferred bidder negotiation phase?
   I don't think the quality of the relationship influenced the movement - I think it goes back to what I was saying - the only areas where I have seen movement in price has possibly been about where a bidder hasn't been completely open in some of their qualifications and this manifests itself at the PB stage as a price hike.

3. What influence did the financier have on:
   a) Your relationship with your public sector partner?

b) Any changes in price during the preferred bidder negotiation stage?

You get into an interesting situation with funders. You quite often get public sector partner here, private sector partner almost along side them agreeing with them, and the funders are saying 'you can't do that - this is my money and I'll take my money away if you don't do things the way I want'. It is often two against one. All the way through the bidding phase you have built a really strong relationship with the public sector client, often you are very good friends. The funders active involvement really only starts at the PB stage and they are quite focused on what they need to get out of the project and sometimes that cuts across things the other parties thought were agreed - so it can stretch the relationship slightly.

D) Sunk Costs

1. Approximately how big (as a % of project value or relative to one another) were bidding costs?
   a) At appointment of Preferred Bidder
   b) Just before financial close

   The FM contractor does not have as bigger sunk costs as the builder (who has the design consultants fees), mainly it's staff costs. You can usually get the legal and financial consultants to hang out for the majority of their fee being paid at financial close. So it is around 100 - 200K for each of them as sunk cost - the rest is contingent upon closing the deal - it gives them a bit of motivation to close the deal as well.
   Design consultants no longer work at risk - i.e. get paid only if the bid is won. They did do this in the early days but this has long since gone.
   One project I know in the order of 150m cap ex the costs that were at risk prior to financial close were in the order of 4-5 million. About 5%. Most of the cost is in the preferred bidder stage. Less than 1m is spent prior to PB. That's the whole point, once you reach PB then all the deferred fees get paid, and there is no undertaking from the public sector to pay anything until the service is in operation.

2. Did you feel (or have evidence that) your sunk costs made you vulnerable to price change between Preferred Bidder and financial close?
   - If yes, please elaborate...

   Most of the pressure in that circumstance would actually be to reduce your price. The FM partner generally right from the start of the PB stage is under quite a bit of pressure to look at their price and see if they can squeeze their price. The FM price actually usually goes down from PB to FC, where as a general rule the construction price generally creeps up a little bit. We have had quite a bit of pressure in the past to swallow costs / price reductions just to get the deal done. In fact I have seen it happen on Financial Close day. It is more to do with 'can you still do it for the same price' when area has increased.

E) Preferred Bidder Duration

1. What was the influence of the duration of the preferred bidder stage on any price drift in projects you have been involved with?

   I don't think it has any influence at all, apart from RPI, depending upon how long the PB stage is. The base date for the price would change. The longer the PB stage, the more the price will increase, but there is usually some agreement in the PB letter as to how the construction price will change based upon a *certain length of PB stage - there is a pricing mechanism by which the construction price will go up by x pounds per week.*

2. Describe the influence of the existence of inflation (MIPS uplift) on price change?

3. Describe your experience in regard to the practice of agreeing a fixed price at Preferred Bidder?
-Explain the effect of any expiry time on the fixed price, how was this expiry time decided, and what was the result in any projects where the fixed price expired?

4. What influence did the duration of the preceding OJEC - PB period have on the PB negotiation duration? – Was the use of BAFO or FITN extended clarifications influential?

   If the client has rushed into selecting its PB, then that can have a direct impact on the length of the PB negotiations. However, you can't go the other way (and the MOD are really guilty of this) that they go from ITN, they will have a BAFO, and then an revise and confirm - unbelievable levels of detail just to select your PB. The amount of effort involved is usually not worth it, and often it is because the MOD can't make their mind up - not having clear water between the bidders. It goes back to something I said earlier about the project directors having experience - if you have experienced project directors then they ought to be able to make a decision between bidders based on the ITN documentation. If they haven't possibly got a full understanding of the ITN documents or how to evaluate the bids properly in relation to the ITN documents then that's when you get into the extended clarifications stages to understand what each bidder is proposing and so on.

F) Time – Historical

1. Describe how average relative price drift has changed from earlier to more recent projects you have been involved with?

   The ones I have been involved with that have had a change in price, have all been due to specific things, which have been different on each one. One was to do with retained estate, one was to do with retained estate being taken out.

2. What do you believe are the reasons for any historical price drift trends?
- Were there any key events or public policy changes (PFI general and sector specific) that directly affected the PB-FC price drift at specific points in time for the projects you have been involved with? e.g. the Bates Review, Standardised contracts, introduction of Gateway review process.

   If there was price drift, especially in terms of capital cost, in the early ones, it was probably a lot due to people learning the ropes, and what was the standard form of contract at the time was in its infancy (particularly in the healthcare sector). With the standard form now, there is so little to negotiate. Virtually on day one, when you get the bid document now, you know what issues you are going to raise and that's all you are going to raise because there is nowhere to go on the rest. There is much more clarity on the private sector side about which areas there are for negotiation, and that has a knock on effect in terms of price certainty and duration down the line. The only reason that projects get extended at PB stage now is because there is some project specific issue that's caused some delay. But if the project scope has been sorted out, it just follows its course. Where we still have problems negotiating PFIs is where clients don't use standard stuff, and we would be wary of bidding for projects where this was the case.

G) Time - Fiscal

1. What influence did the fiscal / accounting year (generally the end of December for contractors, end of March for public sector authorities) have on the preferred bidder negotiation phase generally and price drift specifically?

   I'm not really sure. In the NHS there is a slightly different driver now, because a lot of NHS trusts are trying to go for foundation status. In one deal I have been involved with recently that tended to set the timetable for financial close - they wanted to reach FC before foundation status came in, and with that a new board of directors who would have to review the entire project and would delay it.
   I can understand why the public sector would want to close before the end of the financial year - all public bodies are driven by annual budgets, however ours is December to December.

H) Project Size

1. To what extent are the following project factors of the project influential in any PB price drift on the projects you have been involved with?
   a) size / scale
   b) Capital value
   c) Project complexity
   - How do you view the relationship between these factors?

   It is more to do with the complexity, the more technology (medical equipment, IM&T), the more retained estate, they are the issues that tend to impact on the PB stage. Those issues tend to crop up again and again. The NHS has just about learnt its lesson about IT now, and they usually leave it out completely. The recent projects have had a lot of medical equipment in them recently. The trusts do not realise how much it costs to provide fully managed equipment service. The high cost is related to taking full price risk on replacement bits of these very expensive pieces of medical equipment. It is the cost of doing the job properly, which they hadn't been doing previously.

I) Affordability & Scope

1. Describe any affordability issues that arose during the preferred bidder stage?

   The affordability thing always bugs me a little bit. The NHS public sector comparators always seem to be a bit light in terms of some of the figures they use. Generally with decent NHS public sector teams you get a feel for what they can afford fairly early on, which helps you a lot. Other public sector procurement teams, particularly the MOD, seem to go down the routes to procurement long before they have ever established whether or not they can afford the projects.

2. Describe any changes in project scope (i.e. variations in the design or agreed service) during the PB negotiation phase?
   a) Who introduced the scope change (either client, or PB)
   b) What was the relationship between scope change and price change? (i.e. was the scope change made to retain a fixed price, or did it result in a price change? Also how did an increase in scope effect any fixed price agreement already in place? Was benchmarking used?)

J) Risk

1. Was there a reallocation or reassessment of risk during the PB negotiation phase?
   - If so, what actually happened, why did this occur and what effect did this have on the project price?

   With the NHS most things are buttoned up now, the only real area that I know has happened is the retained estate. Prior to PB retained estate was in the project, and once they understood the costs involved the trust took the retained estate out of the deal. For most NHS deals the risk allocation is now cast in stone almost. The other potential area is where maybe the project started off with full FM services in, and the trust have decided to take soft FM out. There could be a number of reasons for that, not necessarily all related to risk, but also scope and pressure from unions. The unions are adamant that they don't want anyone transferring to the private sector. The retention of employment model has taken away a lot of this though - where by the staff are still employed by the public sector but managed by the PFI company, and they seem to feel more comfortable with that. It has actually changed the risk profile for that element of the project from the FM contractor's perspective. This has been in place for a number of years now and is part of the standard form - it's not a negotiation thing. The decision making process is whether you put soft services in in the first place. I know of one trust that has looked at taking soft services out of the deal during the PB stage.

K) Opportunism

1. Describe any examples of what you consider to be opportunistic behaviour by the public sector partner during preferred bidder negotiations? i.e: that maybe resulted in you questioning the worth of continuing with the project?
   - What was the influence of this on any price change?

   I would suggest that that possibly happened in the earlier days. The beauty of the standard form is that there is less scope on both side to be able to open up issues. I can think of maybe areas where we would be doing our due diligence and they have not disclosed things that maybe they should have. But that is more to do with you making sure you do your job properly. It could not be opportunism, it could be that they don't understand that that's what you needed to see. It might not have been deliberate. How ever hard you try you would need to spend years doing due diligence to establish every element of cost involved in a project and you don't have time to do that. So you just identify the clear cut stuff and it's not until you get into operation that you find out that you have to cover the cost of that when you thought the trust was going to cover it - is that opportunistic, I don't think so really.

2. What was the influence of the existence of any reserve bidder during preferred bidder negotiations, and did this influence any changes in price?

   I never heard of a reserve bidder being contacted. However, in one project where we had been in PB for about a year and the trust mentioned in conversation that they could always go back to 'such and such'. But you could almost get a sense that they were not serious. The reality is that it is almost impossible to go back to a reserve bidder. This is because what happens is that the unsuccessful bid team gets disbanded and moved onto other projects, which makes getting them back together, should a reserve bidder be used, extremely difficult. You could do it, but would take at least 6 months and actually put you back further than would resolving is issue that put you there in the first place.

3. What do you think would be the effect on your reputation & the reputation of the public sector partner, if having got to preferred bidder you fail to reach financial close?

   People tend not to throw mud at one another in those situations. I can think of one project where we got to PB and the government pulled the plug on it. And while the consortium concerned had incurred a huge amount of cost, they decided to bite the bullet and not make a big issue about it, because of the reputational difficulties. If each party started to blame the other, certainly the private sector partner has got much more to loose, the public sector partner can probably get away with it. The MOD does it on a reasonably regular basis, so they have a reputation out there for doing that - they have also closed some very good deals.

L) Conclusion

Before we finish, please feel free to further elaborate on any issues already discussed, or that you believe we have not touched on yet.

Finally, thank you for sharing your valuable time, knowledge and experience today.